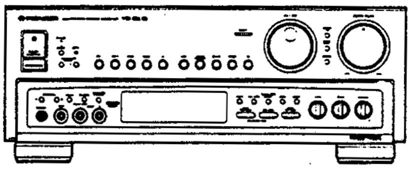
**PIONEER**
*The Art of Entertainment*

# Service Manual



The illustration shows model VSX-D903S

**ORDER NO.**
**ARP2851**

## AUDIO/VIDEO STEREO RECEIVER

# VSX-D903S

# VSX-D933S VSX-53 VSX-D703S VSX-D603S VSX-D613S VSX-D633S

**THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).**

| Type | Model | | | | | | | Power Requirement | The voltage can be converted by the following method. |
|---|---|---|---|---|---|---|---|---|---|
| | VSX-D903S | VSX-D933S | VSX-53 | VSX-D703S | VSX-D603S | VSX-D613S | VSX-D633S | | |
| KU | ○ | – | – | ○ | ○ | – | – | AC 120V | ——— |
| KC | ○ | – | – | – | – | ○ | – | AC 120V | ——— |
| KU/CA | – | – | ○ | – | – | – | – | AC 120V | ——— |
| SD | ○ | – | – | – | ○ | – | – | AC 110V/120-127V/220V/240V | With the voltage selector |
| HL | – | ○ | – | – | – | – | ○ | AC 220-230V | AC 240V, * |

* : Alter the wiring of the Power-supply block at the primary winding of Power transformer referring to the "Line Voltage Selection" described in Service Manual.

- **For the following : VSX-D903S/KC and SD ; VSX-D933S/HL ; VSX-D603S/SD ; VSX-D613S/KC ; VSX-D633S/HL, refer to page 111.**

## CONTENTS

1. SAFETY INFORMATION ········· 2
2. DISASSEMBLY ········· 3
3. EXPLODED VIEWS, PACKING AND PARTS LIST ········· 4
4. BLOCK DIAGRAMS ········· 11
5. SCHEMATIC AND PCB DIAGRAMS ········· 14
6. PCB PARTS LIST ········· 76
7. ADJUSTMENTS ········· 90
8. FL INFORMATION ········· 92
9. IC INFORMATION ········· 93
10. REMOTE CONTROL UNIT ········· 101
11. FOR VSX-D903S/KC, SD, VSX-D933S/HL, VSX-D603S/SD, VSX-D613S/KC AND VSX-D633S/HL ········· 111
12. PANEL FACILITIES ········· 117
13. SPECIFICATIONS ········· 126

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# 1. SAFETY INFORMATION

**This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.**

**WARNING**
**Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.**

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols -▮▭⊞- (fast operating fuse) and/or -▮▭⊠- (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible -▮▭⊞- (fusible de type rapide) et/ou -▮▭⊠- (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

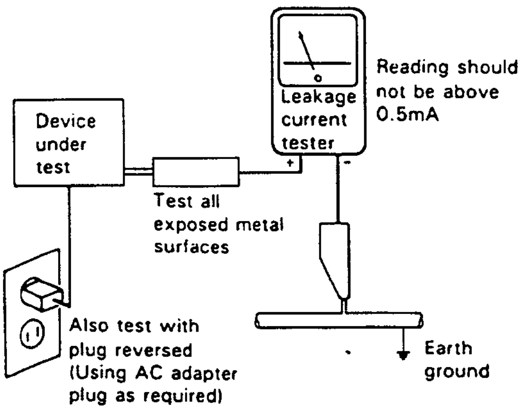
(FOR USA MODEL ONLY)

## 1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

**LEAKAGE CURRENT CHECK**

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Leakage current tester
Reading should not be above 0.5mA
Device under test
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground
+
-

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

## 2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

**WARNING!**

Lithium batteries. Danger of explosion. Replacement must be done by qualified personnel and only by following the instructions given in the service manual.

This warning is stated on the product or in the operating instructions. When replacing the lithium batteries, follow the note below.

Dispose of the used battery promptly. Keep away from children. Do not disassemble and do not dispose of in fire.

The battery used in this device may present a fire or chemical hazard if mistreated. Do not recharge, disassemble, heat above 100°C or incinerate. Replace only with the same Part Number. Use of another battery may present a risk of fire or explosion.

Note: The lithium battery installation position is shown in the exploded view and the P.C. board pattern.

**ADVARSEL!**

Lithiumbatteri — Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

Denne advarsel or angivet på produktet eller i brugsvejledningen. Ved udskiftning af lithium batterierne følges nedenstående anveisning.

Batterierne må kun udskiftes med batterier af samme type og mærke.

**VARNING!**

Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

Denna varning finns på apparaten eller i bruksanvisningen. Följ nedanstående anvisningar vid byte av litiumbatterier. Batterierna får endast bytas ut mot litiumbatterier av samma typ och fabrikat.

# 2. DISASSEMBLY

## • Operation Check Procedure of POWER AMP ASSY

1. (This step is only performed for VSX - D903S and VSX - D933S .)
   Remove the shield case A for GUI assy and SR & S. TERMINAL assy. Move it toward the left side of the set with lead wires. (five screws and a rivet.)
2. Remove five binders (① – ⑤) in the position where the surrounding radiator.
3. Remove a lead Ⓐ of thermistor which soldering the CONNECTION assy.
4. Remove four screws to remove the radiator and four screws to remove the POWER AMP assy.
5. Stand the radiator with the POWER AMP assy on the chassis by setting the fan motor side toward the under, and perform the POWER AMP assy check.

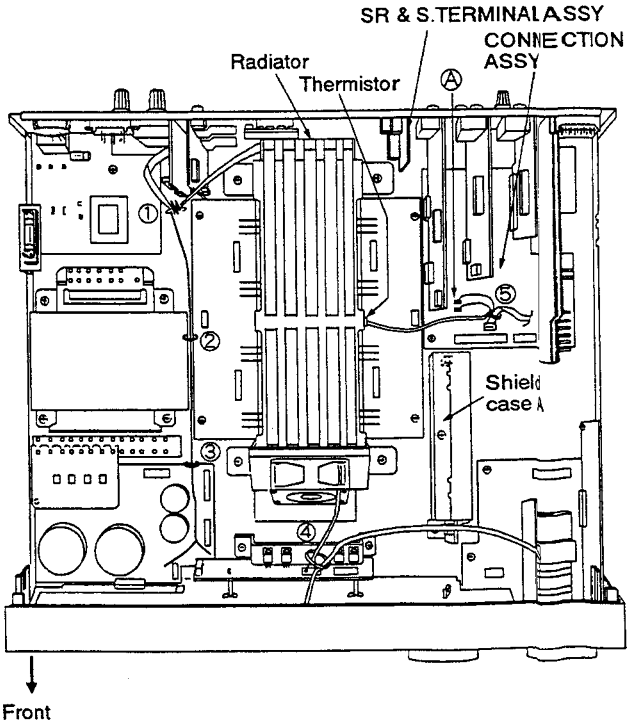


Fig. 1

# 3. EXPLODED VIEWS, PACKING AND PARTS LIST

*NOTES:*

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

## • Parts List (For VSX-D703S/KU and VSX-D603S/KU)

| Mark | No. | Description | Part No. |
|---|---|---|---|
| NSP | 1 | TUNER ASSY | AWE1140 |
| | 2 | POWER AMP ASSY | AWZ5402 |
| | 3 | PRIM ASSY | AWZ5405 |
| NSP | 4 | TRANS ASSY | AWZ5406 |
| NSP | 5 | FRONT SP ASSY | AWZ5413 |
| NSP | 6 | R.C. SP ASSY | AWZ5414 |
| | 7 | REG ASSY | AWZ5415 |
| | 8 | POWER SUPPLY ASSY | AWZ5437 |
| NSP | 9 | R.C. MUTE ASSY | AWZ5707 |
| | 10 | VOL ASSY | AWZ5421 |
| | 11 | AUDIO FUNCTION ASSY | AWZ5422 |
| | 12 | A/V FUNCTION ASSY (VSX-D703S) | AWZ5423 |
| | 12 | A/V FUNCTION ASSY (VSX-D603S) | AWZ5429 |
| | 13 | VIDEO FUNCTION ASSY (VSX-D703S) | AWZ5424 |
| | 13 | VIDEO FUNCTION ASSY (VSX-D603S) | AWZ5430 |
| | 14 | CONNECTION ASSY (VSX-D703S) | AWZ5425 |
| | 14 | CONNECTION ASSY (VSX-D603S) | AWZ5428 |
| | 15 | TONE ASSY | AWZ5426 |
| | 16 | SR ASSY | AWZ5433 |
| NSP | 17 | F.MUTE ASSY | AWZ5708 |
| NSP | 18 | F.VIDEO ASSY (VSX-D703S ONLY) | AWZ5435 |
| | 19 | FL U-COM ASSY (VSX-D703S) | AWZ5605 |
| | 19 | FL U-COM ASSY (VSX-D603S) | AWZ5436 |
| | 20 | PROLOGIC•SFC MODULE | AXQ1024 |
| | 21 | • • • • • | |
| | 22 | • • • • • | |
| | 23 | • • • • • | |
| ⚠ | 24 | Q4 TRANSISTOR | 2SA1302 |
| ⚠ | 25 | Q6 TRANSISTOR | 2SA1302 |
| ⚠ | 26 | Q7 TRANSISTOR | 2SC3181N |
| ⚠ | 27 | Q1 TRANSISTOR | 2SC3281 |
| ⚠ | 28 | Q2 TRANSISTOR | 2SC3281 |
| ⚠ | 29 | Q5 TRANSISTOR | 2SC3281 |
| ⚠ | 30 | Q8 TRANSISTOR | 2SA1264N |
| ⚠ | 31 | Q3 TRANSISTOR | 2SA1302 |
| | 32 | TERMINAL SCREW | AKE-031 |
| ⚠ | 33 | FU5, FU6 FUSE(1.6A, 125V) | AEK-121 |
| ⚠ | 34 | FU3, FU4 FUSE(4A, 125V) | AEK-125 |
| ⚠ | 35 | FU1 FUSE(10A, 125V) | AEK1035 |
| ⚠ | 36 | AC POWER CORD | ADG1146 |
| | 37 | J2 FLEXIBLE CABLE | ADD1134 |
| | 38 | J1 FLEXIBLE FLAT CABLE | ADD1136 |
| NSP | 39 | J3 SHIELD WIRE 5P (VSX-D703S ONLY) | ADX2096 |
| ⚠ | 40 | FAN MOTOR | AXM1022 |
| NSP | 41 | CHASSIS(MTL) | ANA1480 |
| | 42 | REAR PANEL(VSX-D703S) | ANC2195 |
| | 42 | REAR PANEL(VSX-D603S) | ANC2193 |
| NSP | 43 | RADIATOR(AL) | ANH1494 |
| | 44 | FOOT ASSY | AMR2414 |
| | 45 | VOLUME HOLDER(MTL) | ANG1902 |
| | 46 | L STYLE HOLDER(MTL) | ANG1903 |
| | 47 | NYLON BINDER | AEC-093 |
| NSP | 48 | PCB HOLDER | AEC1097 |
| | 49 | PCB HOLDER | AEC1534 |
| NSP | 50 | WIRE CLIP(VSX-D703S ONLY) | AEC1535 |
| | 51 | MICA SHEET | AEE1014 |
| ⚠ | 52 | AC CORD STOPPER | AEP-113 |
| | 53 | BINDER | AEP-215 |
| | 54 | RIVET(PLASTIC) | AMR1066 |
| NSP | 55 | PCB MOULD | AMR1525 |
| | 56 | FAN HOLDER(PLS) | AMR2638 |
| NSP | 57 | PCB SUPPORT | AEC1013 |
| | 58 | 65 LABEL | ORW1069 |
| | 59 | SCREW | ABA-298 |
| | 60 | SCREW | ABA1009 |
| | 61 | SCREW | ABA1018 |
| | 62 | SCREW | ABA1053 |
| | 63 | SCREW | ABA1082 |
| | 64 | SCREW | BPZ26P080FMC |
| | 65 | SCREW | BPZ30P350FZK |
| | 66 | SCREW | FBT40P060FZK |
| | 67 | SCREW | VMZ30P060FCU |
| | 68 | CENTER PANEL(VSX-D703S) | AAK2570 |
| | 68 | CENTER PANEL(VSX-D603S) | AAK2571 |
| | 69 | DISPLAY PANEL(VSX-D703S) | AAK2573 |
| | 69 | DISPLAY PANEL(VSX-D603S) | AAK2572 |
| | 70 | IR FILTER(PLS) | AAK2575 |
| | 71 | NAME PLATE(METAL) | AAM1058 |
| | 72 | LED LENS(ABS) | PNW2019 |
| | 73 | JOG DIAL(PLS) | AAB2224 |
| | 74 | VOLUME KNOB(PLS) | AAB2225 |
| | 75 | ROUND KNOB(PLS) | AAB2226 |
| | 76 | FUNCTION BUTTON(PLS) | AAD2470 |

| Mark | No. | Description | Part No. |
|---|---|---|---|
|  | 77 | SELF LIGHT BUTTON B(PLS) | AAD2472 |
|  | 78 | MUTE BUTTON(PLS) | AAD4047 |
|  | 79 | ASC BUTTON(PLS) | AAD4049 |
|  | 80 | TX BUTTON(PLS) | AAD4050 |
|  | 81 | SP BUTTON(PLS) (VSX-D703S ONLY) | AAD4051 |
|  | 82 | POWER BUTTON(PLS) | AAD4052 |
|  | 83 | OPERATING INSTRUCTIONS (ENGLISH)(VSX-D703S) | ARB1478 |
|  | 83 | OPERATING INSTRUCTIONS (ENGLISH)(VSX-D603S) | ARB1477 |
| NSP | 84 | GUI MODE BUTTON (VSX-D603S ONLY) | AAD4053 |
|  | 85 | REMOTE CONTROL UNIT (CU-VSX080)(VSX-D703S) | AXD1393 |
|  | 85 | REMOTE CONTROL UNIT (CU-VSX084)(VSX-D603S) | AXD1385 |
|  | 86 | FM ANTENNA | ADH1004 |
| NSP | 87 | ALKALINE(LR6,AA) (VSX-D703S) | AEX1007 |
| NSP | 88 | ALKALINE(LR03,AAA) (VSX-D603S) | AEX1006 |
|  | 89 | FRONT PAD(PS) | AHA2005 |
|  | 90 | REAR PAD(PS) | AHA2006 |
|  | 91 | PACKING CASE(VSX-D703S) | AHD2756 |
|  | 91 | PACKING CASE(VSX-D603S) | AHD2753 |
|  | 92 | PACKING SHEET | AHG1021 |
|  | 93 | BONNET CASE(MTL) | ANE1525 |
|  | 94 | BATTERY COVER(VSX-D703S) | AZN2091 |
|  | 94 | BATTERY COVER(VSX-D603S) | AZN2256 |
|  | 95 | FRONT PANEL(VSX-D703S) | AMB2489 |
|  | 95 | FRONT PANEL(VSX-D603S) | AMB2488 |
| ⚠ | 96 | TH1 THERMISTOR | NTH2218F |
| ⚠ | 97 | T1 POWER TRANSFORMER | ATS1545 |
| NSP | 98 | CUT OFF RAYS SEAT | AED1160 |
|  | 99 | SCREW | ABA1009 |
|  | 100 | LOOP ANTENNA ASSY | ATB1005 |

## ● Parts List
## (For VSX-D903S/KU and VSX-53/KU/CA)

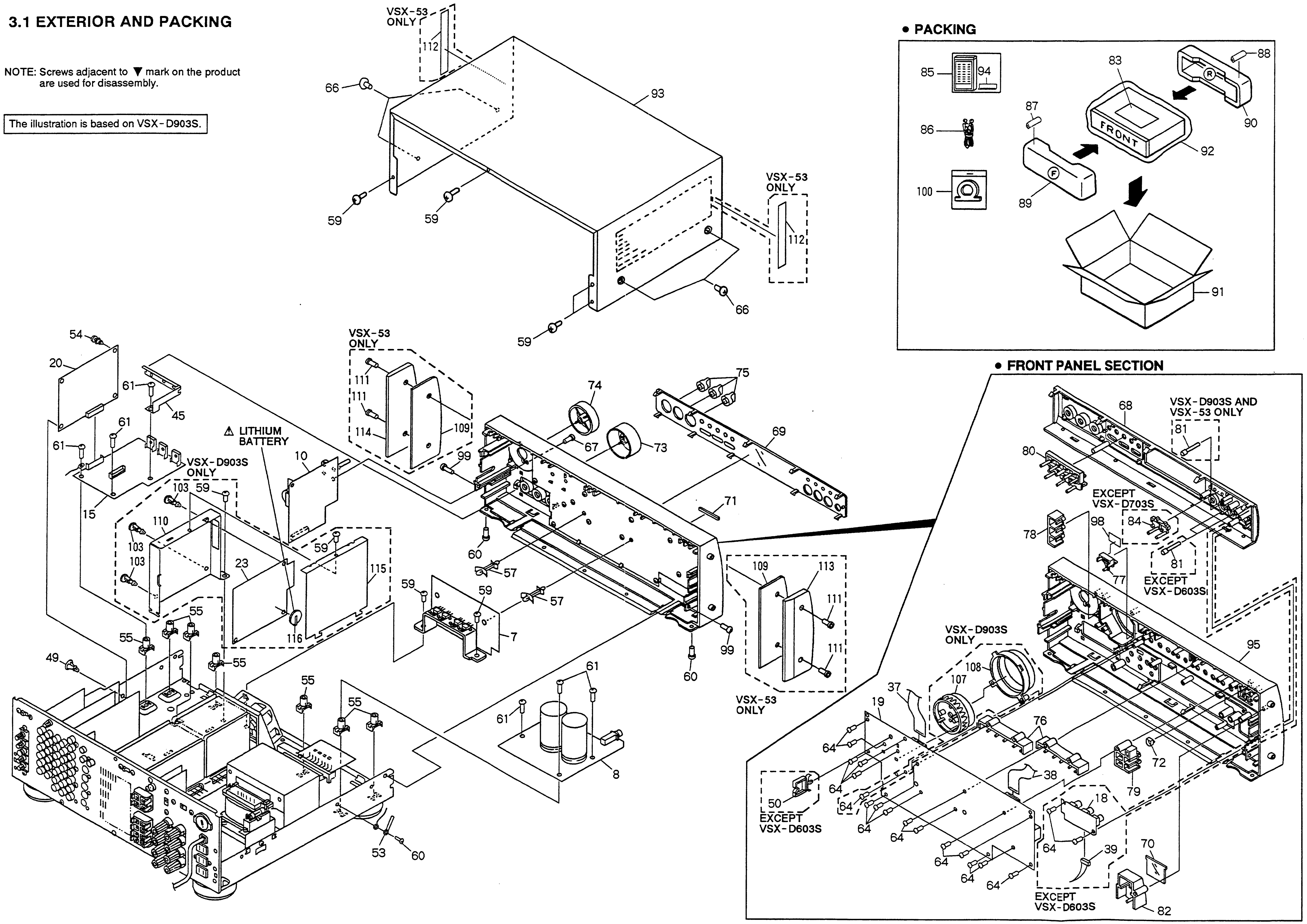
| Mark | No. | Description | Part No. |
|---|---|---|---|
| NSP | 1 | TUNER ASSY | AWE1140 |
|  | 2 | POWER AMP ASSY | AWZ5402 |
|  | 3 | PRIM ASSY | AWZ5405 |
| NSP | 4 | TRANS ASSY | AWZ5406 |
| NSP | 5 | FRONT SP ASSY | AWZ5407 |
| NSP | 6 | R.C. SP ASSY | AWZ5408 |
|  | 7 | REG ASSY(VSX-D903S) | AWZ5403 |
|  | 7 | REG ASSY(VSX-53) | AWZ5621 |
|  | 8 | POWER SUPPLY ASSY | AWZ5404 |
| NSP | 9 | R.C. MUTE ASSY | AWZ5707 |
|  | 10 | VOL ASSY | AWZ5421 |
|  | 11 | AUDIO FUNCTION ASSY (VSX-D903S) | AWZ5416 |
|  | 11 | AUDIO FUNCTION ASSY (VSX-53) | AWZ5728 |
|  | 12 | A/V FUNCTION ASSY | AWZ5417 |
|  | 13 | VIDEO FUNCTION ASSY (VSX-D903S) | AWZ5418 |
|  | 13 | VIDEO FUNCTION ASSY (VSX-53) | AWZ5431 |
|  | 14 | CONNECTION ASSY(VSX-D903S) | AWZ5419 |
|  | 14 | CONNECTION ASSY(VSX-53) | AWZ5432 |
|  | 15 | TONE ASSY(VSX-D903S) | AWZ5420 |
|  | 15 | TONE ASSY(VSX-53) | AWZ5426 |
|  | 16 | • • • • • |  |
| NSP | 17 | F.MUTE ASSY | AWZ5708 |
| NSP | 18 | F.VIDEO ASSY | AWZ5435 |
|  | 19 | FL U-COM ASSY(VSX-D903S) | AWZ5434 |
|  | 19 | FL U-COM ASSY(VSX-53) | AWZ5438 |
|  | 20 | PROLOGIC·SFC MODULE | AXQ1029 |
| NSP | 21 | SW ASSY | AWZ5412 |
| NSP | 22 | SR & S.TERMINAL ASSY (VSX-D903S) | AWQ1024 |
| NSP | 22 | SR & S.TERMINAL ASSY (VSX-53) | AWQ1026 |
| NSP | 23 | GUI ASSY(VSX-D903S ONLY) | AWQ1025 |
| ⚠ | 24 | Q4 TRANSISTOR | 2SA1302 |
| ⚠ | 25 | Q6 TRANSISTOR | 2SA1302 |
| ⚠ | 26 | Q7 TRANSISTOR | 2SC3181N |
| ⚠ | 27 | Q1 TRANSISTOR | 2SC3281 |
| ⚠ | 28 | Q2 TRANSISTOR | 2SC3281 |
| ⚠ | 29 | Q5 TRANSISTOR | 2SC3281 |
| ⚠ | 30 | Q8 TRANSISTOR | 2SA1264N |
| ⚠ | 31 | Q3 TRANSISTOR | 2SA1302 |
|  | 32 | TERMINAL SCREW | AKE-031 |
| ⚠ | 33 | FU5, FU6(1.6A, 125V) | AEK-121 |
| ⚠ | 34 | FU3, FU4(4A, 125V) | AEK-125 |
| ⚠ | 35 | FU1(10A, 125V) | AEK1035 |
| ⚠ | 36 | AC POWER CORD | ADG1146 |
|  | 37 | J2 FLEXIBLE CABLE | ADD1134 |
|  | 38 | J1 FLEXIBLE FLAT CABLE | ADD1136 |
| NSP | 39 | J3 SHIELD WIRE 5P | ADX2096 |
| ⚠ | 40 | FAN MOTOR | AXM1022 |
| NSP | 41 | CHASSIS(MTL) | ANA1480 |
|  | 42 | REAR PANEL(MTL)(VSX-D903S) | ANC2197 |

| Mark | No. | Description | Part No. |
|---|---|---|---|
|  | 42 | REAR PANEL(MTL)(VSX-53) | ANC2239 |
| NSP | 43 | RADIATOR(AL) | ANH1494 |
|  | 44 | FOOT ASSY | AMR2414 |
|  | 45 | VOLUME HOLDER(MTL) | ANG1902 |
|  | 46 | L STYLE HOLDER(MTL) | ANG1903 |
|  | 47 | NYLON BINDER | AEC-093 |
| NSP | 48 | PCB HOLDER | AEC1097 |
|  | 49 | PCB HOLDER | AEC1534 |
| NSP | 50 | WIRE CLIP | AEC1535 |
|  | 51 | MICA SHEET | AEE1014 |
| ⚠ | 52 | AC CORD STOPPER | AEP-113 |
|  | 53 | BINDER | AEP-215 |
|  | 54 | RIVET(PLASTIC) | AMR1066 |
| NSP | 55 | PCB MOULD | AMR1525 |
|  | 56 | FAN HOLDER(PLS) | AMR2638 |
| NSP | 57 | PCB SUPPORT | AEC1013 |
|  | 58 | 65 LABEL | ORW1069 |
|  | 59 | SCREW | ABA-298 |
|  | 60 | SCREW(STEEL) | ABA1009 |
|  | 61 | SCREW | ABA1018 |
|  | 62 | SCREW(STEEL) | ABA1053 |
|  | 63 | SCREW | ABA1082 |
|  | 64 | SCREW | BPZ26P080FMC |
|  | 65 | SCREW | BPZ30P350FZK |
|  | 66 | SCREW(STEEL) | FBT40P060FZK |
|  | 67 | SCREW | VMZ30P060FCU |
|  | 68 | CENTER PANEL(PLS) | AAK2570 |
|  | 69 | DISPLAY PANEL(PLS) (VSX-D903S) | AAK2574 |
|  | 69 | DISPLAY PANEL(PLS)(VSX-53) | AAK2576 |
|  | 70 | IR FILTER(PLS) | AAK2575 |
|  | 71 | NAME PLATE(METAL) | AAM1058 |
|  | 72 | LED LENS | PNW2019 |
|  | 73 | JOG DIAL(PLS) | AAB2224 |
|  | 74 | VOLUME KNOB(PLS) | AAB2225 |
|  | 75 | ROUND KNOB | AAB2226 |
|  | 76 | FUNCTION BUTTON | AAD2470 |
|  | 77 | SELF LIGHT BUTTON B | AAD2472 |
|  | 78 | MUTE BUTTON(PLS) | AAD4047 |
|  | 79 | ASC BUTTON(PLS) | AAD4049 |
|  | 80 | TX BUTTON(PLS) | AAD4050 |
|  | 81 | SP BUTTON(PLS) | AAD4051 |
|  | 82 | POWER BUTTON(PLS) | AAD4052 |
|  | 83 | OPERATING INSTRUCTIONS (ENGLISH)(VSX-D903S) | ARB1489 |
|  | 83 | OPERATING INSTRUCTIONS (ENGLISH)(VSX-53) | ARB1490 |
|  | 84 | GUI MODE BUTTON(PLS) | AAD4048 |
|  | 85 | REMOTE CONTROL UNIT (CU-VSX079)(VSX-D903S) | AXD1394 |
|  | 85 | REMOTE CONTROL UNIT (CU-VSX080)(VSX-53) | AXD1393 |
|  | 86 | FM ANTENNA | ADH1004 |
| NSP | 87 | ALKALINE(LR6, AA)LR6 | AEX1007 |
|  | 88 | • • • • • |  |
|  | 89 | FRONT PAD(PS)(VSX-D903S) | AHA2005 |
|  | 89 | FRONT PAD(PS)(VSX-53) | AHA2013 |
|  | 90 | REAR PAD(PS)(VSX-D903S) | AHA2006 |
|  | 90 | REAR PAD(PS)(VSX-53) | AHA2014 |
|  | 91 | PACKING CASE(VSX-D903S) | AHD2766 |
|  | 91 | PACKING CASE(VSX-53) | AHD2769 |
|  | 92 | PACKING SHEET | AHG1021 |
|  | 93 | BONNET CASE(MTL) | ANE1525 |
|  | 94 | BATTERY COVER | AZN2091 |
|  | 95 | FRONT PANEL(PLS) (VSX-D903S) | AMB2492 |
|  | 95 | FRONT PANEL(PLS)(VSX-53) | AMB2490 |
| ⚠ | 96 | TH1 THERMISTOR | NTH2218F |
| ⚠ | 97 | T1 POWER TRANSFORMER | ATS1545 |
| NSP | 98 | CUT OFF RAYS SEAT | AED1160 |
|  | 99 | SCREW(VSX-D903S) | ABA1009 |
|  | 99 | SCREW(VSX-53) | ABA1011 |
|  | 100 | LOOP ANTENNA ASSY | ATB1005 |
| NSP | 101 | TUNER CASE(MTL) (VSX-D903S ONLY) | ANK1217 |
| NSP | 102 | SPACER | AEC1288 |
| NSP | 103 | SPACER(VSX-D903S ONLY) | AEC1360 |
| ⚠ | 104 | R1 RESISTOR | ACN1111 |
|  | 105 | INSULATING PLATE | AMR2672 |
|  | 106 | SCREW | VMZ26P040FZK |
|  | 107 | ESCUTCHEON(VSX-D903S ONLY) | AAK2585 |
|  | 108 | SELF-LIGHT RING (VSX-D903S ONLY) | AAK2586 |
|  | 109 | SIDE PLATE(RUB) (VSX-53 ONLY) | AAP1479 |
|  | 110 | SHIELD CASE A(MTL) (VSX-D903S ONLY) | ANG1926 |
|  | 111 | SCREW(VSX-53 ONLY) | ABA1148 |
| NSP | 112 | SPACER(VSX-53 ONLY) | AEC1430 |
|  | 113 | SIDE PANEL L(PLS) (VSX-53 ONLY) | AMR2661 |
|  | 114 | SIDE PANEL R(PLS) (VSX-53 ONLY) | AMR2662 |
|  | 115 | SHIELD CASE B(MTL) (VSX-D903S ONLY) | ANG1927 |
| ⚠ | 116 | LITHIUM BATTERY (VSX-D903S ONLY) | AEX1020 |

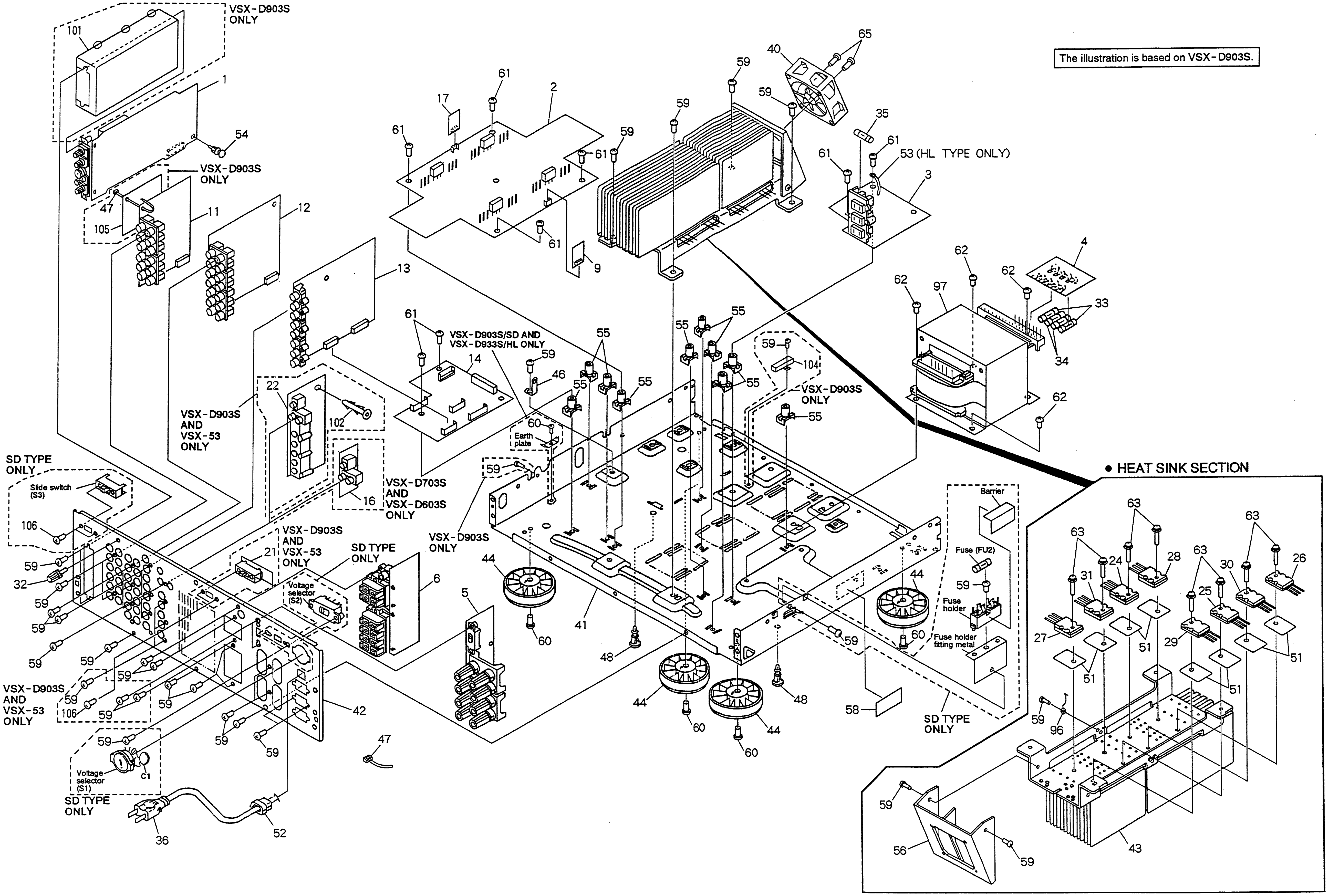
## 3.1 EXTERIOR AND PACKING

NOTE: Screws adjacent to ▼ mark on the product are used for disassembly.

The illustration is based on VSX-D903S.

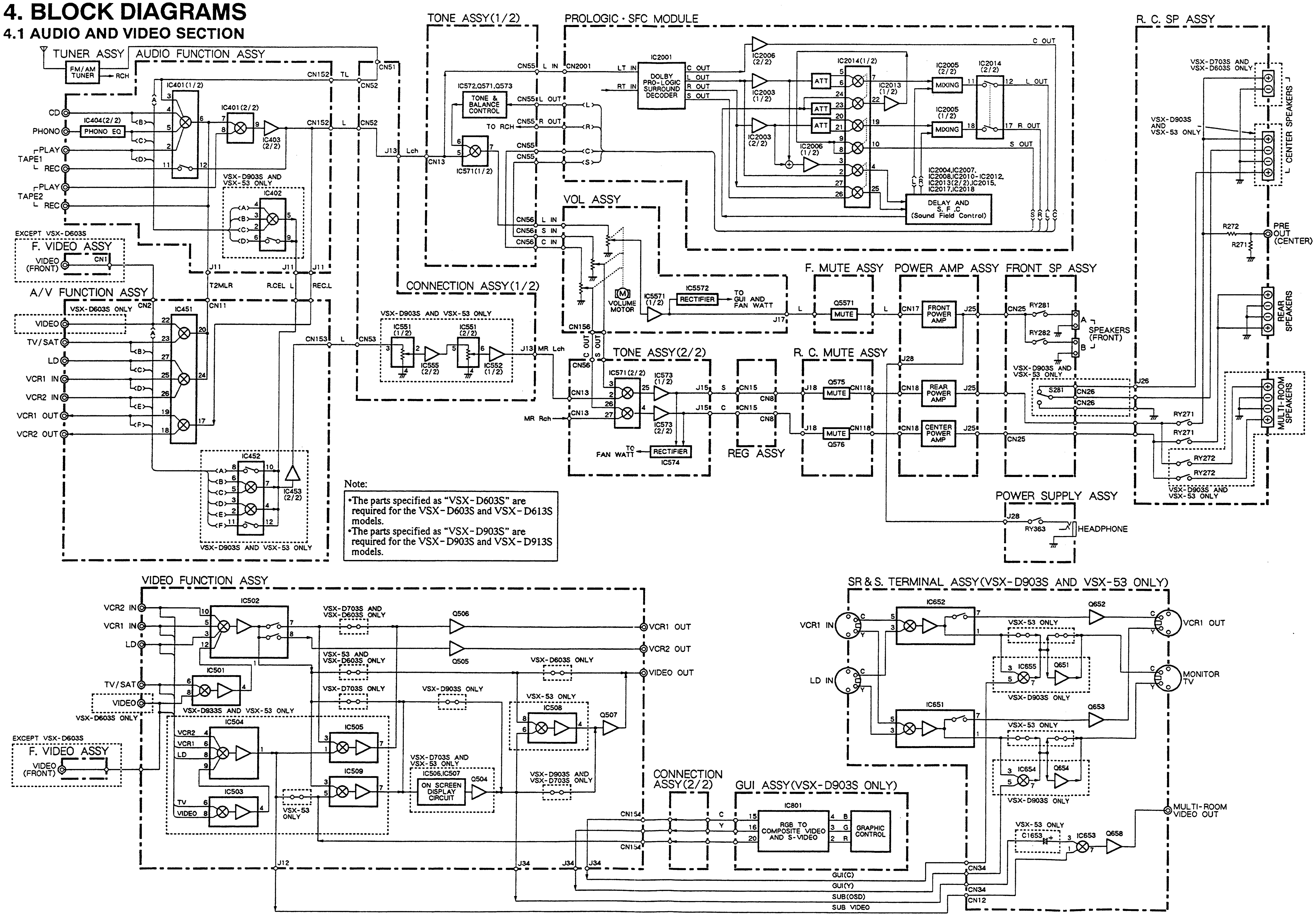

VSX-53 ONLY
112
66
93
59
59
VSX-53 ONLY
112
66
59
• PACKING
85
94
86
100
83
87
88
90
92
89
91
FRONT
54
20
61
45
61
61
15
VSX-D903S ONLY
103
59
110
103
103
⚠ LITHIUM BATTERY
10
23
59
115
116
VSX-53 ONLY
111
111
114
109
99
74
67
73
75
69
71
60
57
57
59
59
7
109
113
111
111
99
60
VSX-53 ONLY
55
55
55
55
49
55
55
61
61
8
53
60
• FRONT PANEL SECTION
68
VSX-D903S AND VSX-53 ONLY
81
80
EXCEPT VSX-D703S
98
84
78
77
81
EXCEPT VSX-D603S
VSX-D903S ONLY
108
107
37
19
95
76
64
64
64
64
50
EXCEPT VSX-D603S
38
72
79
18
64
64
64
64
64
64
39
70
EXCEPT VSX-D603S
82

## 3.2 INTERIOR


The illustration is based on VSX-D903S.
VSX-D903S ONLY
VSX-D903S ONLY
53 (HL TYPE ONLY)
VSX-D903S/SD AND VSX-D933S/HL ONLY
VSX-D903S ONLY
VSX-D903S AND VSX-53 ONLY
Earth plate
VSX-D903S ONLY
VSX-D703S AND VSX-D603S ONLY
SD TYPE ONLY
Slide switch (S3)
VSX-D903S AND VSX-53 ONLY
SD TYPE ONLY
Voltage selector (S2)
Barrier
Fuse (FU2)
Fuse holder
Fuse holder fitting metal
SD TYPE ONLY
VSX-D903S AND VSX-53 ONLY
Voltage selector (S1)
C1
SD TYPE ONLY
● HEAT SINK SECTION

# 4. BLOCK DIAGRAMS

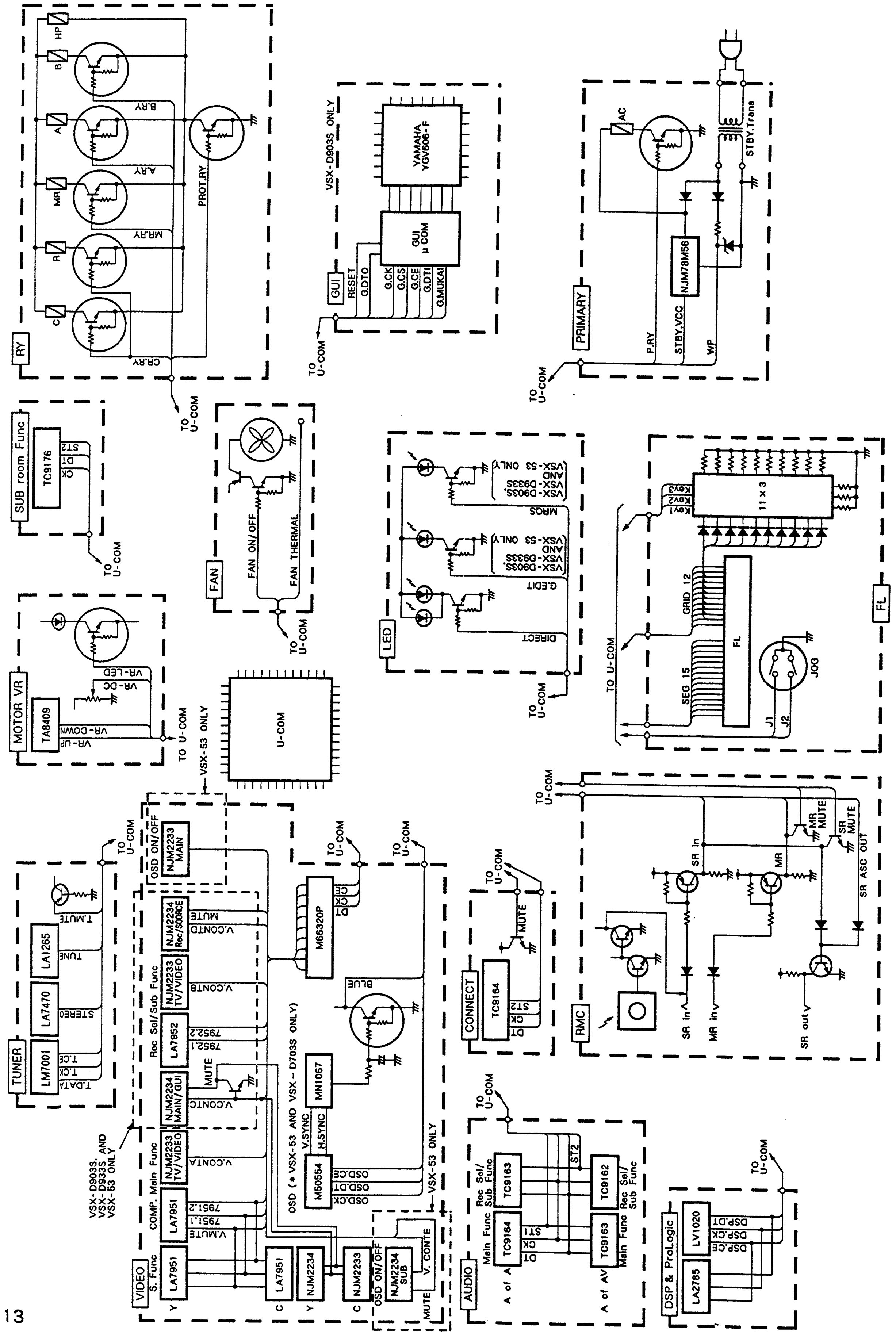
## 4.1 AUDIO AND VIDEO SECTION


TUNER ASSY
FM/AM TUNER
AUDIO FUNCTION ASSY
CD
PHONO
PHONO EQ
TAPE1 PLAY
TAPE1 REC
TAPE2 PLAY
TAPE2 REC
IC401(1/2)
IC401(2/2)
IC404(2/2)
IC403 (2/2)
IC402
VSX-D903S AND VSX-53 ONLY
EXCEPT VSX-D603S
F. VIDEO ASSY
VIDEO (FRONT)
A/V FUNCTION ASSY
VSX-D603S ONLY
VIDEO
TV/SAT
LD
VCR1 IN
VCR2 IN
VCR1 OUT
VCR2 OUT
IC451
IC452
IC453 (2/2)
TONE ASSY(1/2)
IC572,Q571,Q573
TONE & BALANCE CONTROL
IC571(1/2)
TO RCH
CONNECTION ASSY(1/2)
IC551 (1/2)
IC551 (2/2)
IC555 (2/2)
IC552 (1/2)
MR Lch
MR Rch
PROLOGIC · SFC MODULE
IC2001
DOLBY PRO-LOGIC SURROUND DECODER
C OUT
L OUT
R OUT
S OUT
IC2006 (2/2)
IC2003 (1/2)
IC2003 (2/2)
IC2006 (1/2)
IC2014(1/2)
ATT
IC2013 (1/2)
IC2005 (2/2)
IC2005 (1/2)
MIXING
IC2014 (2/2)
DELAY AND S. F. C (Sound Field Control)
IC2004,IC2007, IC2008,IC2010-IC2012, IC2013(2/2),IC2015, IC2017,IC2018
VOL ASSY
VOLUME MOTOR
IC5571 (1/2)
IC5572
RECTIFIER
TO GUI AND FAN WATT
TONE ASSY(2/2)
IC571(2/2)
IC573 (1/2)
IC573 (2/2)
IC574
TO FAN WATT
REG ASSY
F. MUTE ASSY
Q5571
MUTE
R. C. MUTE ASSY
Q575
Q576
POWER AMP ASSY
FRONT POWER AMP
REAR POWER AMP
CENTER POWER AMP
FRONT SP ASSY
RY281
RY282
SPEAKERS A B (FRONT)
VSX-D903S AND VSX-53 ONLY
S281
R. C. SP ASSY
VSX-D703S AND VSX-D603S ONLY
CENTER SPEAKERS
R272
R271
PRE OUT (CENTER)
REAR SPEAKERS
MULTI-ROOM SPEAKERS
RY271
RY272
POWER SUPPLY ASSY
RY363
HEADPHONE
VIDEO FUNCTION ASSY
IC502
IC501
IC504
IC503
IC505
IC509
IC508
VSX-D703S AND VSX-D603S ONLY
VSX-53 AND VSX-D603S ONLY
VSX-D703S ONLY
VSX-D903S ONLY
VSX-D603S ONLY
VSX-53 ONLY
VSX-D933S AND VSX-53 ONLY
VSX-D703S AND VSX-53 ONLY
IC506,IC507
ON SCREEN DISPLAY CIRCUIT
Q504
Q505
Q506
Q507
VSX-D903S AND VSX-D703S ONLY
VCR1 OUT
VCR2 OUT
VIDEO OUT
CONNECTION ASSY(2/2)
GUI ASSY(VSX-D903S ONLY)
IC801
RGB TO COMPOSITE VIDEO AND S-VIDEO
GRAPHIC CONTROL
GUI(C)
GUI(Y)
SUB(OSD)
SUB VIDEO
SR & S. TERMINAL ASSY(VSX-D903S AND VSX-53 ONLY)
VCR1 IN
LD IN
IC652
IC651
IC655
IC654
IC653
Q651
Q652
Q653
Q654
Q658
C1653
MONITOR TV
MULTI-ROOM VIDEO OUT

Note:

- The parts specified as "VSX-D603S" are required for the VSX-D603S and VSX-D613S models.
- The parts specified as "VSX-D903S" are required for the VSX-D903S and VSX-D913S models.

### 4.2 MICROCOMPUTER SECTION


RY
HP
B.RY
A
A.RY
MR
MR.RY
R
C
C.RY
PROT.RY
TO U-COM
VSX-D903S ONLY
YAMAHA YGV606-F
GUI μCOM
GUI
RESET
G.DTO
G.CK
G.CS
G.CE
G.DTI
G.MUKAI
AC
STBY.Trans
PRIMARY
NJM78M56
P.RY
STBY.VCC
WP
SUB room Func
TC9176
ST2
DT
CK
FAN
FAN ON/OFF
FAN THERMAL
LED
(VSX-D903S, VSX-D933S AND VSX-53 ONLY)
SDROM
G.EDIT
DIRECT
Key1
Key2
Key3
11×3
GRID 12
SEG 15
FL
JOG
J1
J2
MOTOR VR
TA8409
VR-LED
VR-DC
VR-DOWN
VR-UP
VSX-53 ONLY
U-COM
TUNER
LM7001
LA7470
LA1265
T.DATA
T.CK
T.CE
STEREO
TUNE
T.MUTE
VSX-D903S, VSX-D933S AND VSX-53 ONLY
OSD ON/OFF
NJM2233 MAIN
Rec Sel/Sub Func
NJM2234 Rec/SOURCE
NJM2233 TV/VIDEO
LA7952
NJM2234 MAIN/GUI
MUTE
V.CONTD
V.CONTB
7952.2
7952.1
V.CONTC
M66320P
CE
CK
DT
BLUE
OSD (✱ VSX-53 AND VSX-D703S ONLY)
MN1067
V.SYNC
H.SYNC
M50554
OSD.CE
OSD.DT
OSD.CK
COMP. Main Func
NJM2233 TV/VIDEO
V.CONTA
LA7951
7951.2
7951.1
V.MUTE
VIDEO
S. Func
LA7951
NJM2234
NJM2233
NJM2234 SUB
V. CONTE
Y
C
CONNECT
TC9164
ST2
CK
DT
RMC
SR In
MR In
SR out
MR
MR MUTE
SR MUTE
SR ASC OUT
AUDIO
Main Func
Rec Sel/ Sub Func
TC9164
TC9163
TC9162
ST1
ST2
A of A
A of AV
DSP & ProLogic
LV1020
LA2785
DSP.DT
DSP.CK
DSP.CE

# 5. SCHEMATIC AND PCB DIAGRAMS

## NOTE FOR SCHEMATIC DIAGRAMS

Type 1A

1. When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".

2. Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.

3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance:(F):± 1%, (G):±2%, (K):± 10%, (M):±20% or ±5% unless otherwise noted.

4. **CAPACITORS:**
   Unit : p:pF or μ F unless otherwise noted.
   Ratings : capacitor (μ F) / voltage (V) unless otherwise noted.
   Rated voltage : 50V except for electrolytic capacitors.

5. **COILS:**
   Unit : m:mH or μ H unless otherwise noted.

6. **VOLTAGE AND CURRENT:**
   V : Signal voltage at rated output. (AMPLIFIER SECTION)
   mV : Signal voltage at FM 1kHz, 100% MOD. (TUNER SECTION)
   ▭ or ←V :
   DC voltage (V) at no input signal unless otherwise noted.
   Value in ( ) is DC voltage at rated power.
   ⇐mA or ←mA :
   DC current at no input signal unless otherwise noted.

7. **OTHERS:**
   - ⊘ or ⊘ : Adjusting point.
   - ◀ : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.

8. **SCH - □ ON THE SCHEMATIC DIAGRAM:**
   - SCH- □ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)

9. **SWITCHES** (Underline indicates switch position):

OUT OF PCB ASSY
(SD TYPE ONLY)
S1 : VOLTAGE SELECTOR
(AC110V/120 - 127V/220V/240V)
S2 : VOLTAGE SELECTOR
(AC110V, 120 - 127V/220V, 240V)
S3 : CHANNEL STEP/FM DE - EMPHASIS
(FM 50kHz/50 μ S, AM 9kHz) —— (FM 100kHz/75 μ S, AM 10kHz)

FRONT SP ASSY(VSX - D903S AND VSX - 53 ONLY)
S281 : CENTER SPEAKER SELECTOR

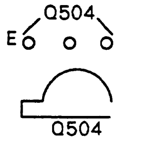
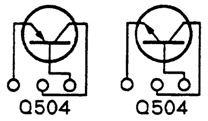
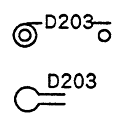
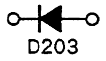
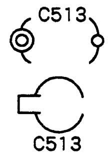
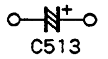
SW ASSY(VSX - D903S AND VSX - 53 ONLY)
S111 : FRONT SPEAKERS IMLEDANCE SELECTOR

(VSX - D903S AND VSX - 53)
FL U - COM ASSY
S701 : VCR 2
S702 : POWER STANDBY/ON
S703 : MUTING
S704 : VIDEO
S705 : MEMORY
S706 : SUPER BASS
S707 : TV/SAT
S708 : 1(AUTO SOURCE CONTROL)
S709 : RETURN
S710 : RESET
S711 : LD
S712 : 2(AUTO SOURCE CONTROL)
S713 : SELECT(TUNING MODE)
S714 : TAPE 1
S715 : SPEAKERS A
S716 : ENTER(TUNIG MODE) ·
S717 : TAPE 2 MONITOR
S718 : SPEAKERS B
S719 : MEMORY(TUNIG MODE)
S720 : PHONO
S721 : REC SEL
S722 : MPX MODE(TUNIG MODE)
S723 : TUNER
S724 : GUI MODE (VSX - D903S)
S724 : OSD SUB ROOM (VSX - 53)
S725 : FM/AM(TUNIG MODE)
S726 : CD
S727 : MULTI - ROOM & SOURCE
S728 : DOLBY 3CH LOGIC
S729 : DIRECT
S730 : VCR 1
S731 : DSP(SORROUND MODE)
S732 : DOLBY PRO - LOGIC
(SORROUND MODE)
S733 : MULTI JOG

(VSX - D703S AND VSX - D603S)
FL U - COM ASSY
S701 : VCR 2
S702 : POWER STANDBY/ON
S703 : MUTING
S704 : VIDEO
S705 : MEMORY
S706 : SUPER BASS
S707 : TV/SAT
S708 : 1(AUTO SOURCE CONTROL)
S709 : RETURN
S710 : RESET
S711 : LD
S712 : 2(AUTO SOURCE CONTROL)
S713 : SELECT(TUNING MODE)
S714 : TAPE 1
S715 : SPEAKERS A
(VSX - D703S ONLY)
S716 : ENTER(TUNIG MODE)
S717 : TAPE 2
S718 : SPEAKERS B
(VSX - D703S ONLY)
S719 : MEMORY(TUNIG MODE)
S720 : PHONO
S722 : MPX MODE(TUNIG MODE)
S723 : TUNER
S724 : SPEAKERS A
(VSX - D603S ONLY)
S725 : FM/AM(TUNIG MODE)
S726 : CD
S727 : SPEAKERS A
(VSX - D603S ONLY)
S728 : DOLBY 3CH LOGIC
S729 : DIRECT
S730 : VCR 1
S731 : DSP(SORROUND MODE)
S732 : DOLBY PRO - LOGIC
(SORROUND MODE)
S733 : TUNER JOG

## NOTE FOR PCB DIAGRAMS:

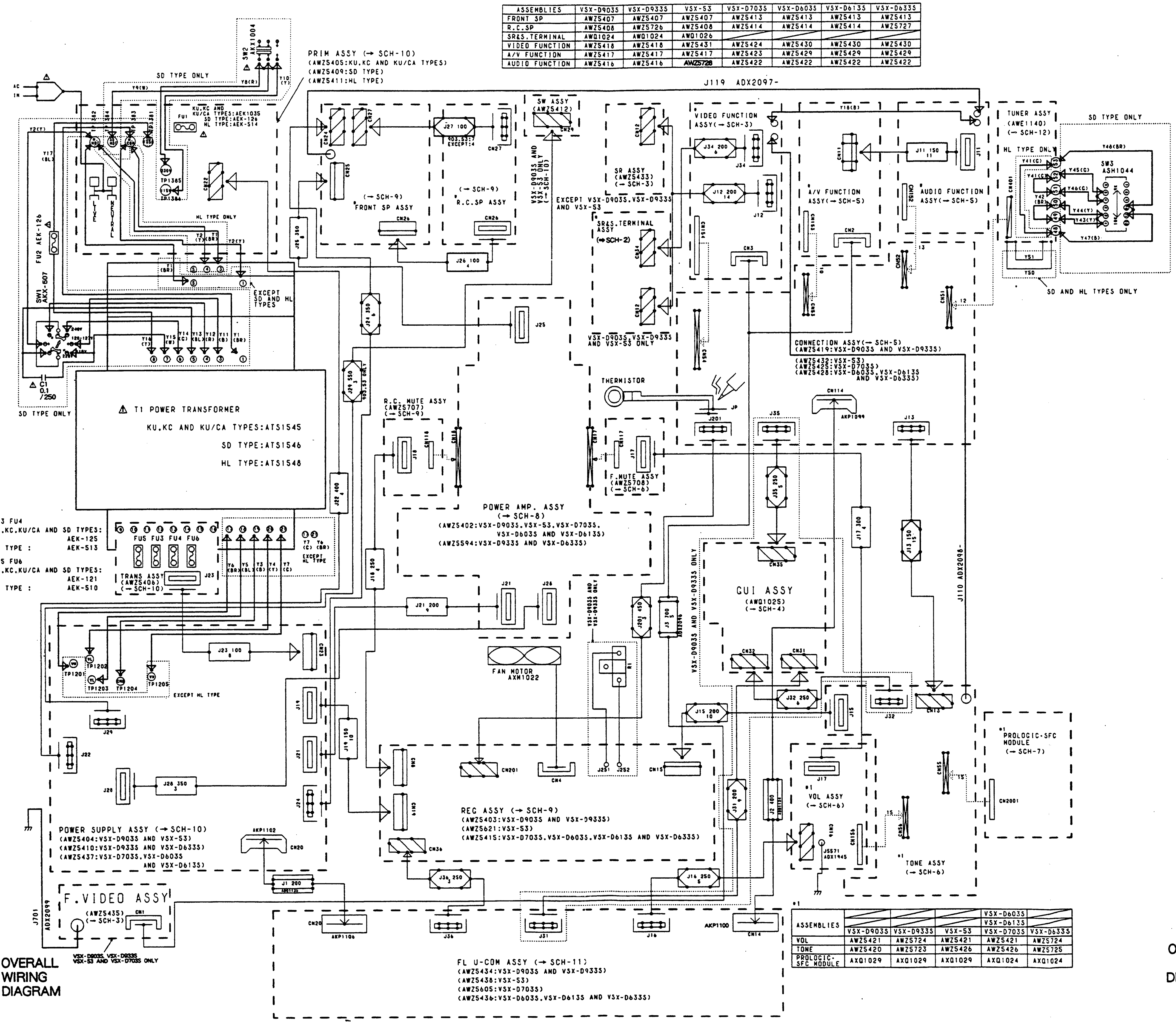
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

| Symbol in PCB Diagrams | Symbol in Schematic Diagrams | Part Name |
|---|---|---|
|  |  | Transistor |
|  |  | Diode |
|  |  | Capacitor<br>(Polarized) |

3. The transistor terminal marked with E or ⊏ shows the emitter.
4. The diode terminal marked with ◎ or ⊂ shows cathode side.
5. The capacitor terminal marked with ◎ or ⊏ shows negative terminal.

## 5.1 OVERALL WIRING DIAGRAM

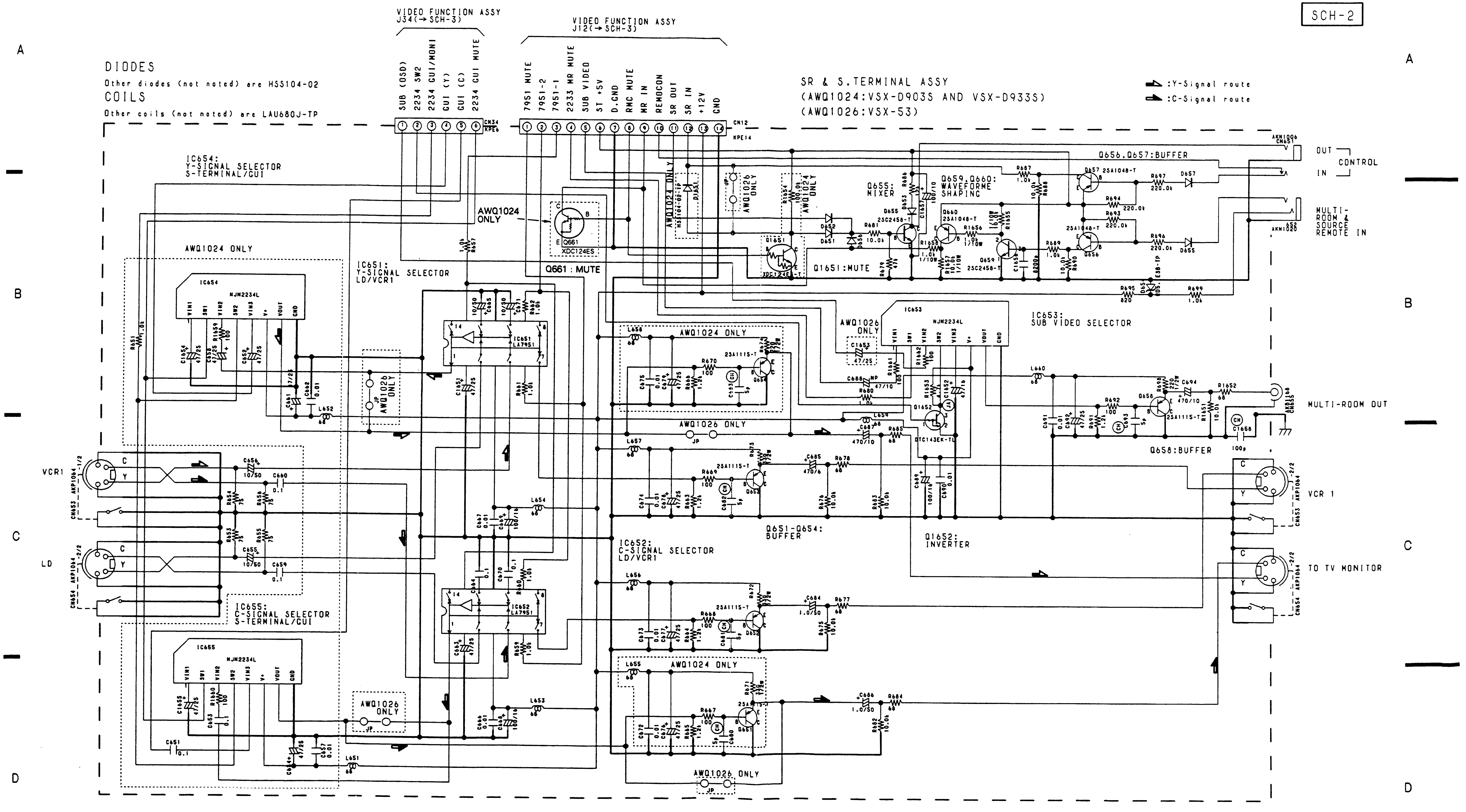
| ASSEMBLIES | VSX-D903S | VSX-D933S | VSX-53 | VSX-D703S | VSX-D603S | VSX-D613S | VSX-D633S |
|---|---|---|---|---|---|---|---|
| FRONT SP | AWZ5407 | AWZ5407 | AWZ5407 | AWZ5413 | AWZ5413 | AWZ5413 | AWZ5413 |
| R.C.SP | AWZ5408 | AWZ5726 | AWZ5408 | AWZ5414 | AWZ5414 | AWZ5414 | AWZ5727 |
| SR&S.TERMINAL | AWQ1024 | AWQ1024 | AWQ1026 |  |  |  |  |
| VIDEO FUNCTION | AWZ5418 | AWZ5418 | AWZ5431 | AWZ5424 | AWZ5430 | AWZ5430 | AWZ5430 |
| A/V FUNCTION | AWZ5417 | AWZ5417 | AWZ5417 | AWZ5423 | AWZ5429 | AWZ5429 | AWZ5429 |
| AUDIO FUNCTION | AWZ5416 | AWZ5416 | AWZ5728 | AWZ5422 | AWZ5422 | AWZ5422 | AWZ5422 |


AC IN
SW2 AKX1004
SD TYPE ONLY
PRIM ASSY (→ SCH-10)
(AWZ5405:KU,KC AND KU/CA TYPES)
(AWZ5409:SD TYPE)
(AWZ5411:HL TYPE)
FU1
KU,KC AND KU/CA TYPES:AEK1035
SD TYPE:AEK-124
HL TYPE:AEK-514
TP1385
TP1384
CN22
HL TYPE ONLY
FU2 AEK-126
SW1 AKX-607
EXCEPT SD AND HL TYPES
C1 0.1 /250
SD TYPE ONLY
T1 POWER TRANSFORMER
KU,KC AND KU/CA TYPES:ATS1545
SD TYPE:ATS1546
HL TYPE:ATS1548
FU3 FU4
KU,KC,KU/CA AND SD TYPES: AEK-125
HL TYPE : AEK-513
FU5 FU6
KU,KC,KU/CA AND SD TYPES: AEK-121
HL TYPE : AEK-510
FU5 FU3 FU4 FU6
TRANS ASSY (AWZ5406) (→ SCH-10)
EXCEPT HL TYPE
J23
TP1201 TP1202 TP1203 TP1204 TP1205
EXCEPT HL TYPE
J29
J22
J28
J28 350
POWER SUPPLY ASSY (→SCH-10)
(AWZ5404:VSX-D903S AND VSX-53)
(AWZ5410:VSX-D933S AND VSX-D633S)
(AWZ5437:VSX-D703S,VSX-D603S AND VSX-D613S)
AKP1102
CN20
J1 200
J701 ADX2099
F.VIDEO ASSY
(AWZ5435) (→ SCH-3)
CN1
VSX-D903S, VSX-D933S, VSX-53 AND VSX-D703S ONLY
FRONT SP ASSY (→ SCH-9)
CN24 CN27 CN25 CN26
J27 100
R.C.SP ASSY (→ SCH-9)
CN27 CN26
J26 100
J25 350
J24 350
J20 550
VSX-53 ONLY
SW ASSY (AWZ5412)
CN29
VSX-D903S AND VSX-53 ONLY (→ SCH-10)
EXCEPT VSX-D903S,VSX-D933S AND VSX-53
SR ASSY (AWZ5433) (→ SCH-3)
SR&S.TERMINAL ASSY (→SCH-2)
VSX-D903S,VSX-D933S AND VSX-53 ONLY
J119 ADX2097-
VIDEO FUNCTION ASSY(→SCH-3)
J34 200
J12 200
J34 J12
CN3
A/V FUNCTION ASSY(→SCH-5)
CN11 CN2
AUDIO FUNCTION ASSY(→SCH-5)
J11 150
CN52 CN51 CN53
TUNER ASSY (AWE1140) (→ SCH-12)
HL TYPE ONLY
CN401
SD TYPE ONLY
SW3 ASH1044
SD AND HL TYPES ONLY
CONNECTION ASSY(→ SCH-5)
(AWZ5419:VSX-D903S AND VSX-D933S)
(AWZ5432:VSX-53)
(AWZ5425:VSX-D703S)
(AWZ5428:VSX-D603S,VSX-D613S AND VSX-D633S)
THERMISTOR
J201
J35
CN114 AKP1099
J13
R.C. MUTE ASSY (AWZ5707) (→ SCH-9)
J18 CN118
CN117 J17
F.MUTE ASSY (AWZ5708) (→ SCH-6)
POWER AMP. ASSY (→ SCH-8)
(AWZ5402:VSX-D903S,VSX-53,VSX-D703S, VSX-D603S AND VSX-D613S)
(AWZ5594:VSX-D933S AND VSX-D633S)
J22 400
J18 250
J21 200
J21 J26
J35 250
J17 300
J13 150
J110 ADX2098-
GUI ASSY (AWQ1025) (→ SCH-4)
VSX-D903S AND VSX-D933S ONLY
CN35 CN32 CN31
J32 250
J32 CN13
J15 200
J15
FAN MOTOR AXM1022
J23 100
CN23
J19 J21 J24
J19 150
REC ASSY (→ SCH-9)
(AWZ5403:VSX-D903S AND VSX-D933S)
(AWZ5621:VSX-53)
(AWZ5415:VSX-D703S,VSX-D603S,VSX-D613S AND VSX-D633S)
CN201 CN4 CN15
J251 J252
CN36
J36 250
J14 250
J31 200
J2 400
J17
VOL ASSY (→ SCH-6)
J5571 ADX1945
CN156
TONE ASSY (→ SCH-6)
CN55 CN56
PROLOGIC-SFC MODULE (→ SCH-7)
CN2001
CN20 AKP1106
J36 J31 J16
AKP1100 CN14
FL U-COM ASSY (→ SCH-11)
(AWZ5434:VSX-D903S AND VSX-D933S)
(AWZ5438:VSX-53)
(AWZ5605:VSX-D703S)
(AWZ5436:VSX-D603S,VSX-D613S AND VSX-D633S)

*1

| ASSEMBLIES |  |  |  | VSX-D603S<br>VSX-D613S<br>VSX-D703S |  |
|---|---|---|---|---|---|
|  | VSX-D903S | VSX-D933S | VSX-53 |  | VSX-D633S |
| VOL | AWZ5421 | AWZ5724 | AWZ5421 | AWZ5421 | AWZ5724 |
| TONE | AWZ5420 | AWZ5723 | AWZ5426 | AWZ5426 | AWZ5725 |
| PROLOGIC-SFC MODULE | AXQ1029 | AXQ1029 | AXQ1029 | AXQ1024 | AXQ1024 |

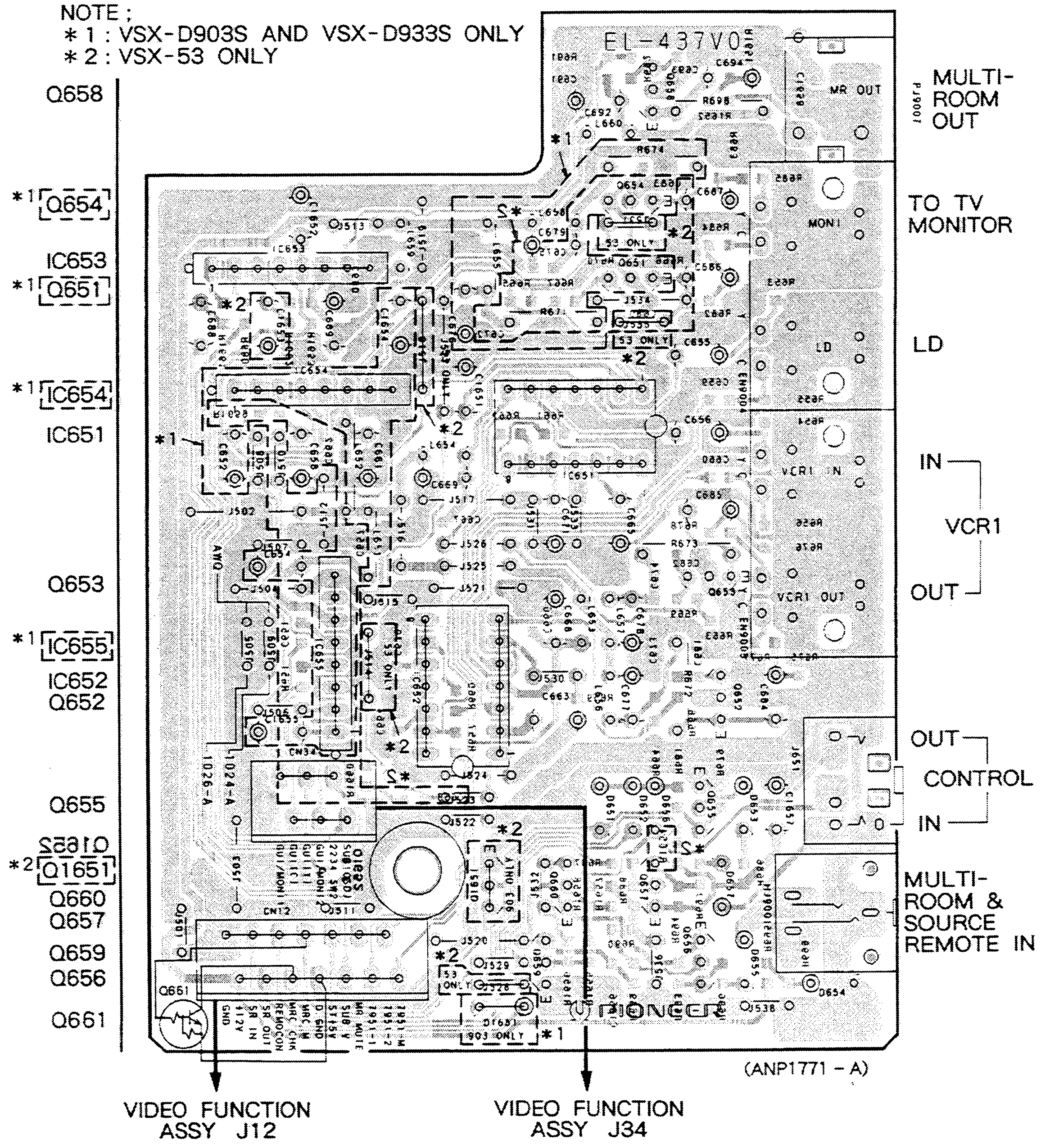
## 5.2 SR & S. TERMINAL ASSY


SCH-2
DIODES
Other diodes (not noted) are HSS104-02
COILS
Other coils (not noted) are LAU680J-TP
VIDEO FUNCTION ASSY J34(→ SCH-3)
SUB (OSD)
2234 SW2
2234 GUI/MONI
GUI (Y)
GUI (C)
2234 GUI MUTE
CN34 KPE6
VIDEO FUNCTION ASSY J12(→ SCH-3)
7951 MUTE
7951-2
7951-1
2233 MR MUTE
SUB VIDEO
ST +5V
D.GND
RMC MUTE
MR IN
REMOCON
SR OUT
SR IN
+12V
GND
CN12 KPE14
SR & S.TERMINAL ASSY
(AWQ1024:VSX-D903S AND VSX-D933S)
(AWQ1026:VSX-53)
:Y-Signal route
:C-Signal route
IC654: Y-SIGNAL SELECTOR S-TERMINAL/GUI
AWQ1024 ONLY
IC654 NJM2234L
IC651: Y-SIGNAL SELECTOR LD/VCR1
IC651 LA7951
AWQ1024 ONLY
XDC124ES
Q661 : MUTE
AWQ1026 ONLY
Q655: MIXER
Q659,Q660: WAVEFORME SHAPING
Q656,Q657:BUFFER
Q1651:MUTE
OUT
CONTROL
IN
MULTI-ROOM & SOURCE REMOTE IN
IC653: SUB VIDEO SELECTOR
IC653 NJM2234L
Q658:BUFFER
MULTI-ROOM OUT
Q1652: INVERTER
DTC143EK-TL
Q651-Q654: BUFFER
2SA1115-T
2SC2458-T
2SA1048-T
IC652: C-SIGNAL SELECTOR LD/VCR1
IC652 LA7951
IC655: C-SIGNAL SELECTOR S-TERMINAL/GUI
IC655 NJM2234L
VCR1
LD
VCR 1
TO TV MONITOR
CN653 AKP1064
CN654 AKP1064
A
B
C
D
1
2
3
4
5
6

## SR & S. TERMINAL ASSY

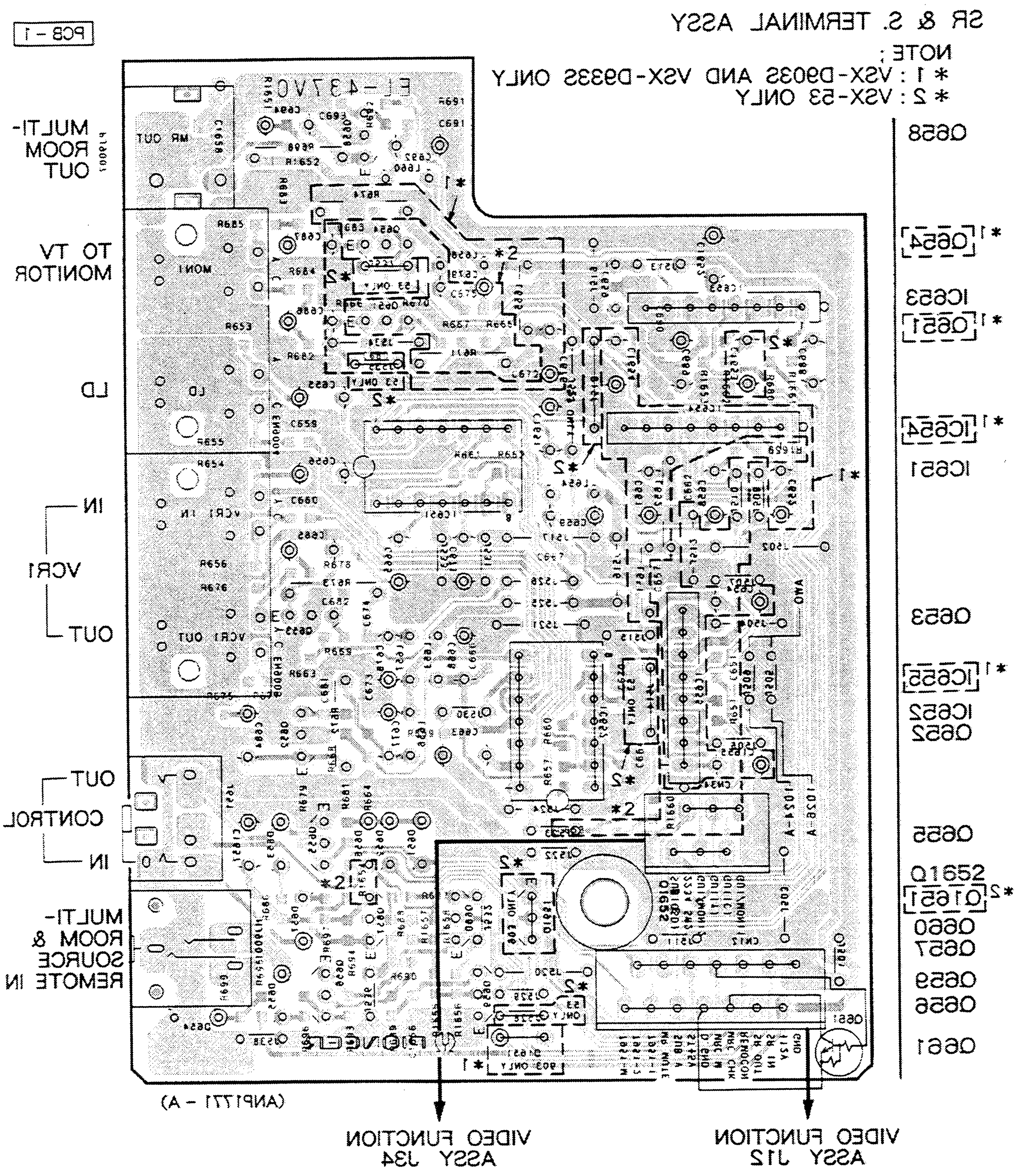
PCB - 1

NOTE ;
∗1 : VSX-D903S AND VSX-D933S ONLY
∗2 : VSX-53 ONLY


Q658
∗1 Q654
IC653
∗1 Q651
∗1 IC654
IC651
Q653
∗1 IC655
IC652
Q652
Q655
Q1652
∗2 Q1651
Q660
Q657
Q659
Q656
Q661
EL-437V0
MULTI-ROOM OUT
TO TV MONITOR
LD
IN
VCR1
OUT
OUT
CONTROL
IN
MULTI-ROOM & SOURCE REMOTE IN
MR OUT
MONI
VCR1 IN
VCR1 OUT
53 ONLY
903 ONLY
PIONEER
(ANP1771 - A)
VIDEO FUNCTION ASSY J12
VIDEO FUNCTION ASSY J34

- This diagram is viewed from the mounted parts side.

A



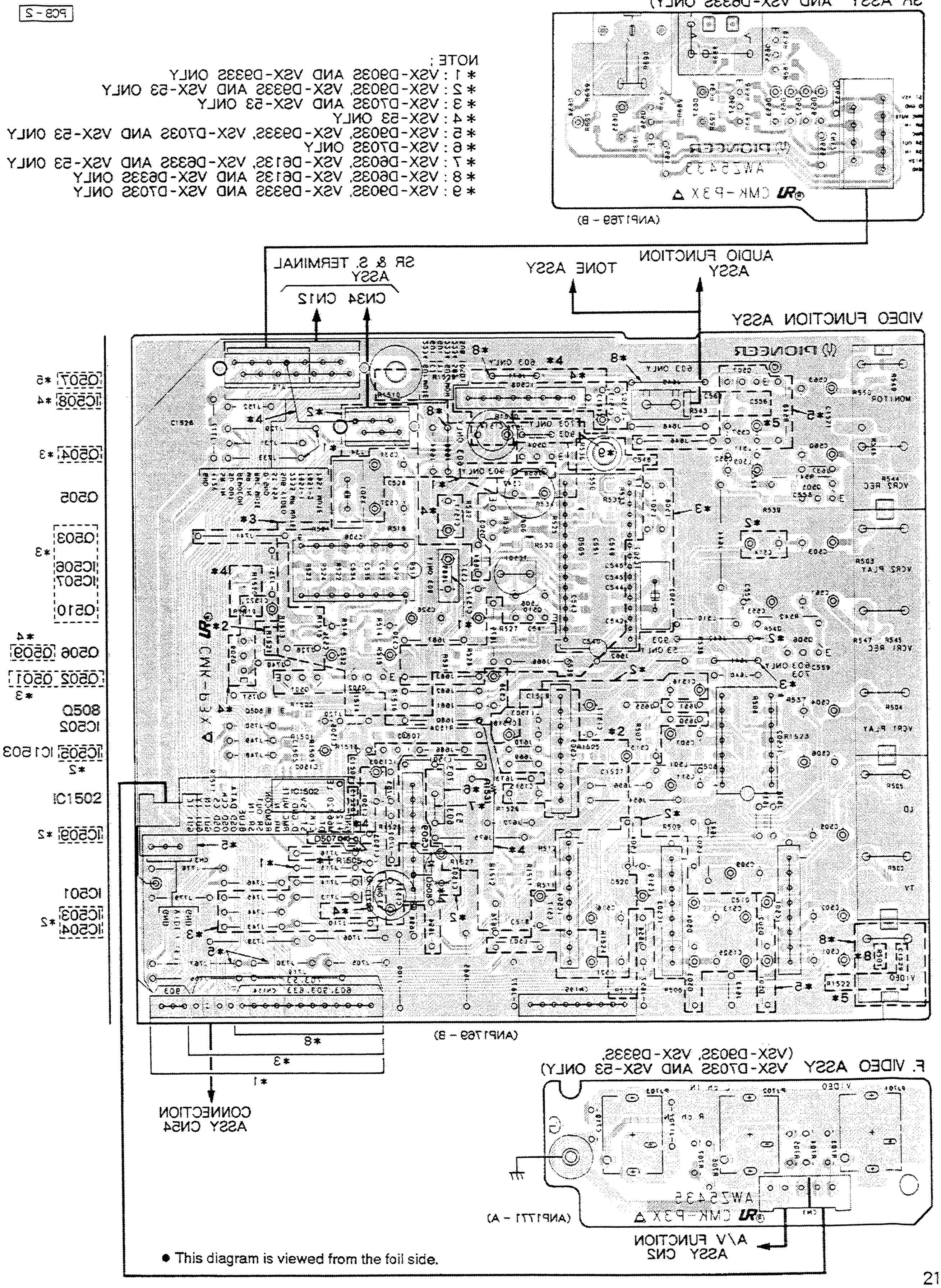
B

C

● This diagram is viewed from the foil side.

D

## 5.3 VIDEO FUNCTION, SR AND F. VIDEO ASSEMBLIES


PCB-2
SR ASSY (VSX-D703S, VSX-D603S, VSX-D613S AND VSX-D633S ONLY)
PIONEER
AWZ5435
CMK-P3X
(ANP1769-B)
AUDIO FUNCTION ASSY
TONE ASSY
SR & S. TERMINAL ASSY
CN34 CN12
VIDEO FUNCTION ASSY
Q507 *6
IC508 *4
Q504 *3
Q505
Q503
IC506
IC507
Q510
*3
*4
Q506 Q509
Q502 Q501
*3
Q508
IC502
IC505 IC1503
*2
IC1502
IC509 *2
IC501
IC503
IC504 *2
CMK-P3X
MONITOR
VCR2 REC
VCR2 PLAY
VCR1 REC
VCR1 PLAY
LD
TV
VIDEO
(ANP1769-B)
*8
*3
*1
CONNECTION ASSY CN54
F. VIDEO ASSY (VSX-D903S, VSX-D933S, VSX-D703S AND VSX-53 ONLY)
AWZ5435
CMK-P3X
(ANP1771-A)
A/V FUNCTION ASSY CN2

NOTE :
* 1 : VSX-D903S AND VSX-D933S ONLY
* 2 : VSX-D903S, VSX-D933S AND VSX-53 ONLY
* 3 : VSX-D703S AND VSX-53 ONLY
* 4 : VSX-53 ONLY
* 5 : VSX-D903S, VSX-D933S, VSX-D703S AND VSX-53 ONLY
* 6 : VSX-D703S ONLY
* 7 : VSX-D603S, VSX-D613S, VSX-D633S AND VSX-53 ONLY
* 8 : VSX-D603S, VSX-D613S AND VSX-D633S ONLY
* 9 : VSX-D903S, VSX-D933S AND VSX-D703S ONLY

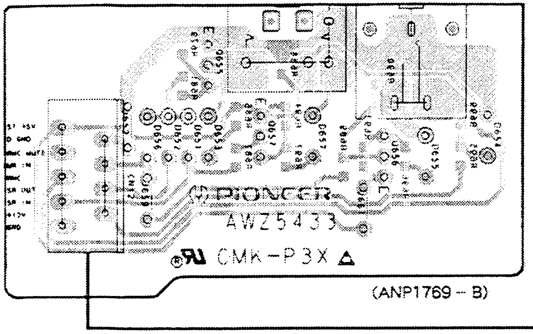
- This diagram is viewed from the foil side.

## 5.3 VIDEO FUNCTION, SR AND F. VIDEO ASSEMBLIES

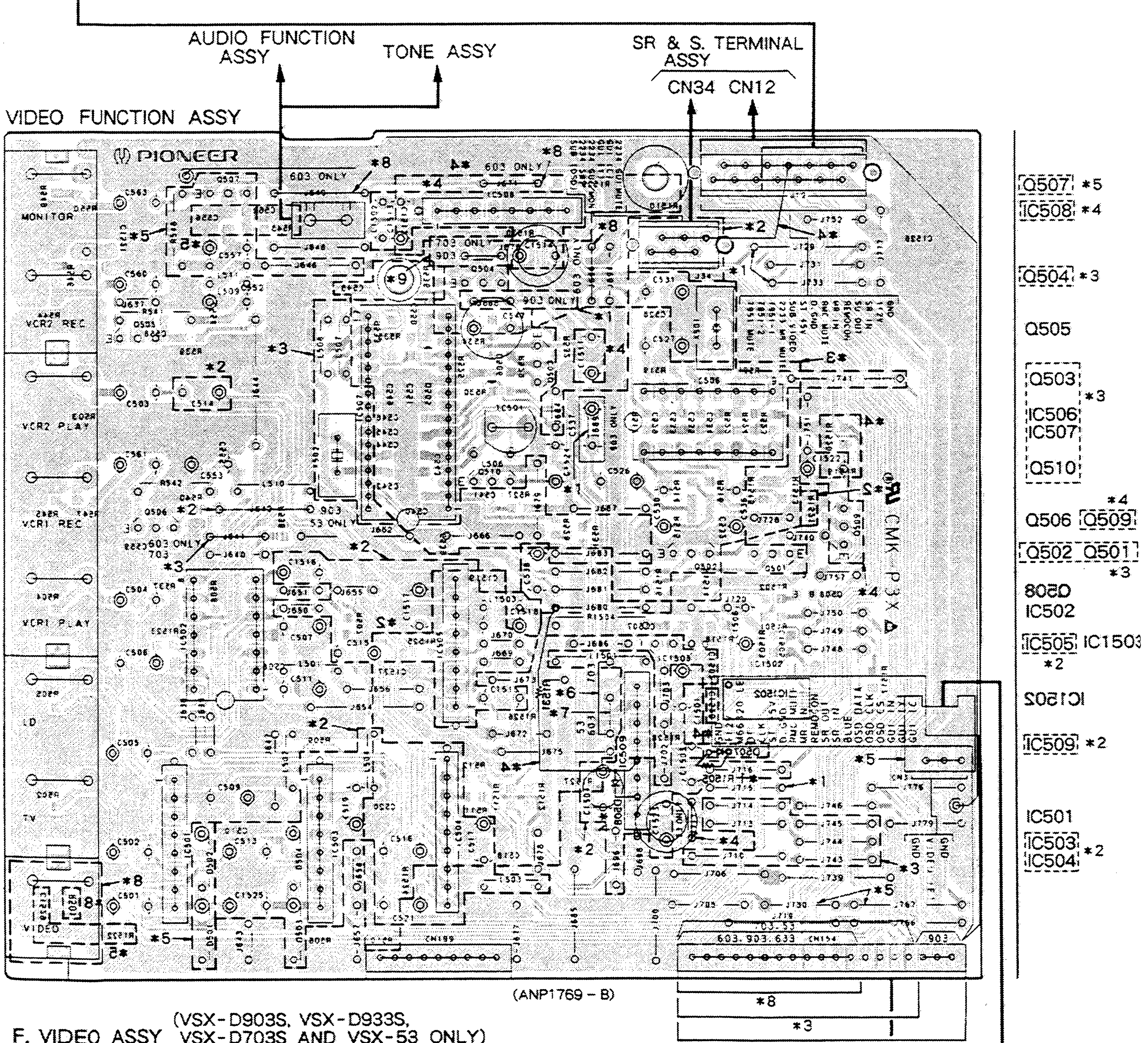
PCB-2

NOTE :
∗1 : VSX-D903S AND VSX-D933S ONLY
∗2 : VSX-D903S, VSX-D933S AND VSX-53 ONLY
∗3 : VSX-D703S AND VSX-53 ONLY
∗4 : VSX-53 ONLY
∗5 : VSX-D903S, VSX-D933S, VSX-D703S AND VSX-53 ONLY
∗6 : VSX-D703S ONLY
∗7 : VSX-D603S, VSX-D613S, VSX-D633S AND VSX-53 ONLY
∗8 : VSX-D603S, VSX-D613S AND VSX-D633S ONLY
∗9 : VSX-D903S, VSX-D933S AND VSX-D703S ONLY

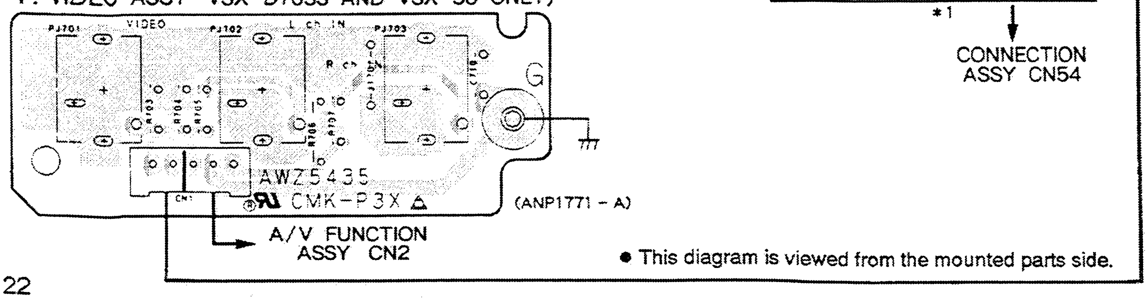
SR ASSY (VSX-D703S, VSX-D603S, VSX-D613S AND VSX-D633S ONLY)


PIONEER
AWZ5433
CMK-P3X
(ANP1769 – B)

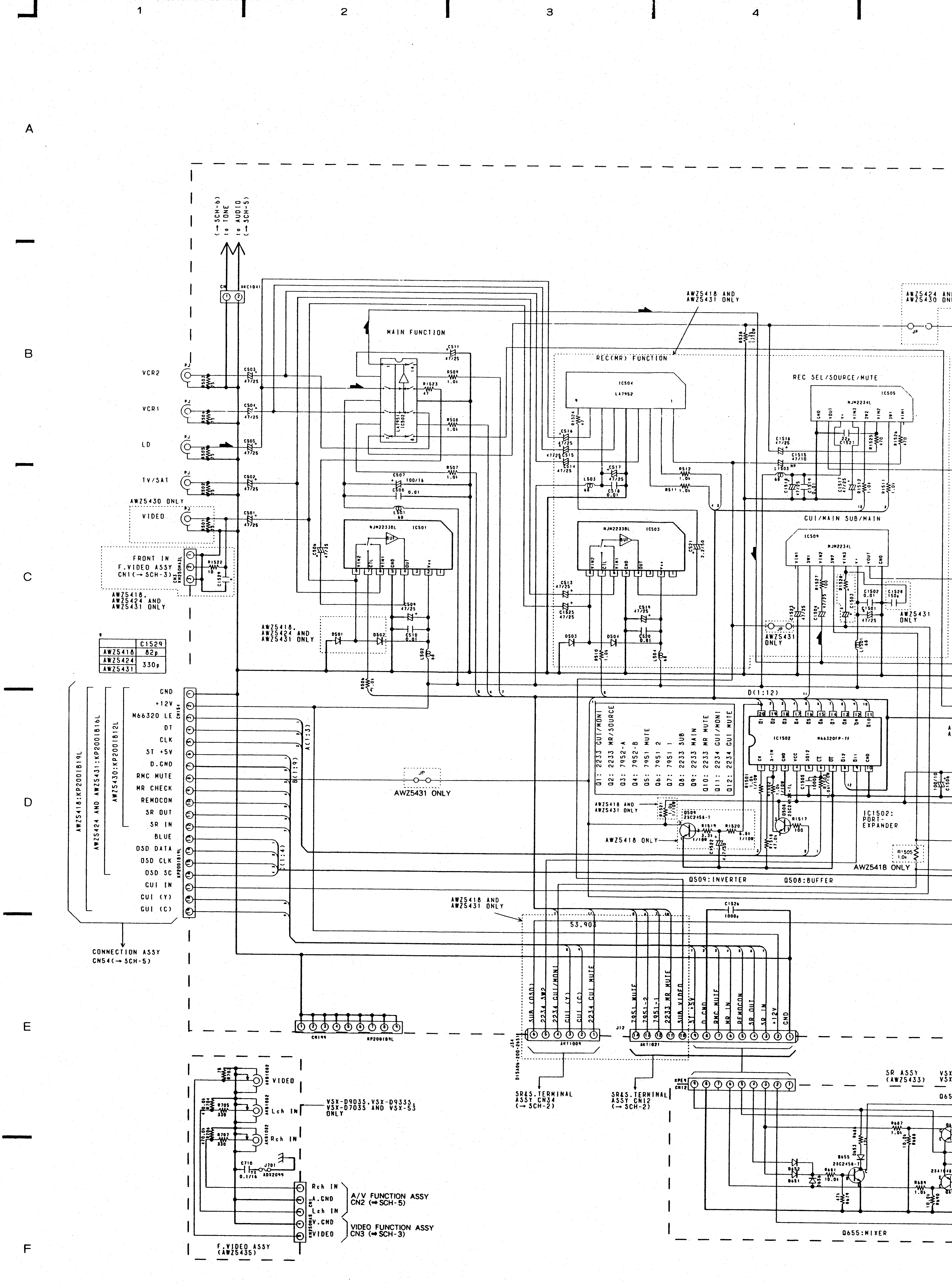
VIDEO FUNCTION ASSY


AUDIO FUNCTION ASSY
TONE ASSY
SR & S. TERMINAL ASSY
CN34 CN12
PIONEER
MONITOR
VCR2 REC
VCR2 PLAY
VCR1 REC
VCR1 PLAY
LD
TV
VIDEO
CMK-P3X
(ANP1769 – B)
∗8
∗3
∗1
Q507 ∗5
IC508 ∗4
Q504 ∗3
Q505
Q503
IC506
IC507
Q510 ∗3
Q506 Q509 ∗4
Q502 Q501 ∗3
Q508
IC502
IC505 IC1503 ∗2
IC1502
IC509 ∗2
IC501
IC503
IC504 ∗2

F. VIDEO ASSY (VSX-D903S, VSX-D933S, VSX-D703S AND VSX-53 ONLY)


CONNECTION ASSY CN54
VIDEO
L ch IN
R ch IN
AWZ5435
CMK-P3X
(ANP1771 – A)
A/V FUNCTION ASSY CN2

● This diagram is viewed from the mounted parts side.

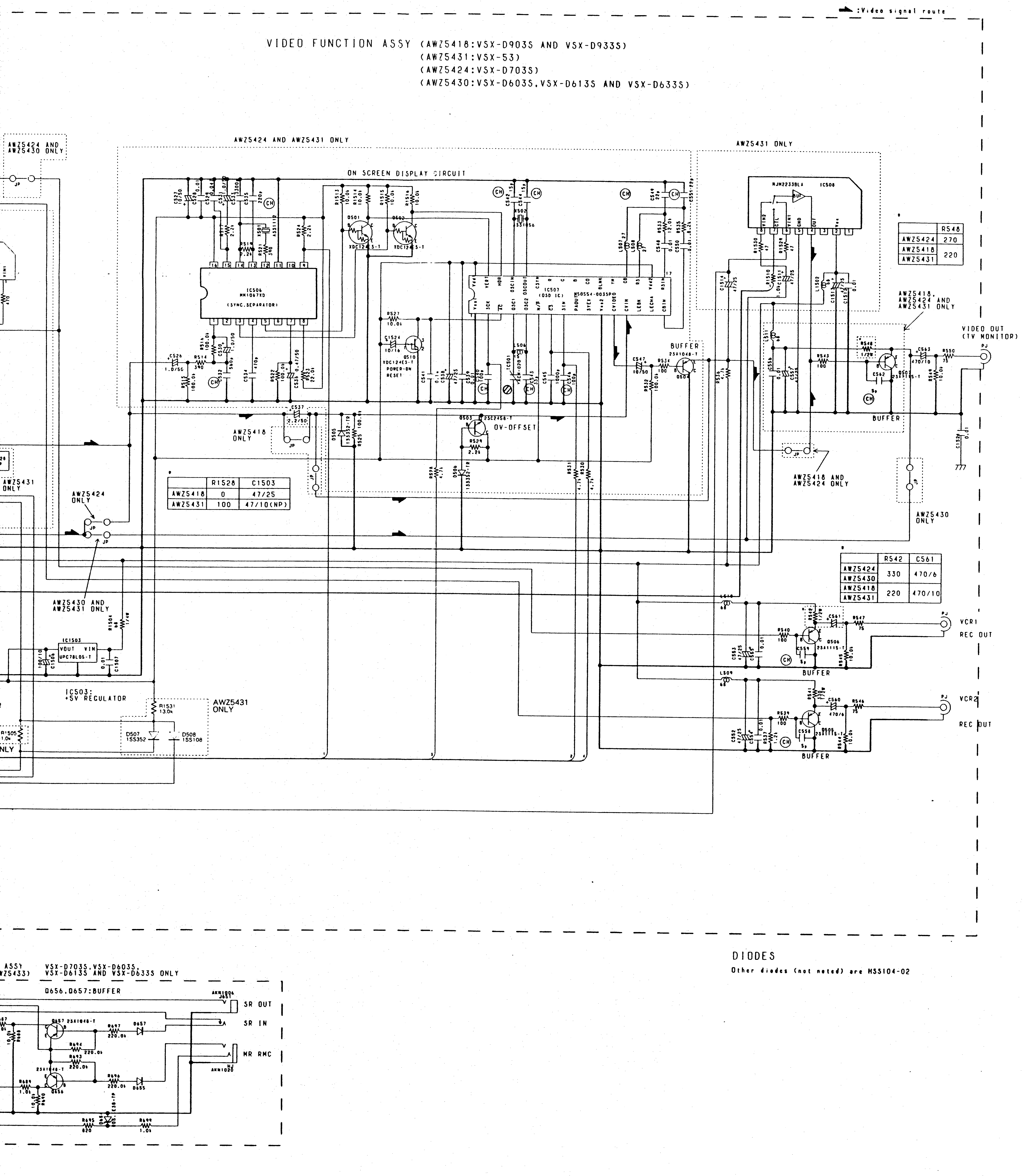


(→ SCH-6) to TONE
to AUDIO (→ SCH-5)
MAIN FUNCTION
REC(MR) FUNCTION
REC SEL/SOURCE/MUTE
GUI/MAIN SUB/MAIN
AWZ5418 AND AWZ5431 ONLY
AWZ5424 AND AWZ5430 ONLY
VCR2
VCR1
LD
TV/SAT
AWZ5430 ONLY
VIDEO
FRONT IN
F.VIDEO ASSY CN1(→ SCH-3)
AWZ5418, AWZ5424 AND AWZ5431 ONLY
IC501 NJM2233BL
IC502 LA7951
IC503 NJM2233BL
IC504 LA7952
IC505 NJM2234L
IC509 NJM2234L
IC1502 M66320FP-TF
IC1502: PORT-EXPANDER
Q509: INVERTER
Q508: BUFFER
AWZ5431 ONLY
AWZ5418 ONLY
C1529
AWZ5418 82p
AWZ5424 330p
AWZ5431
GND
+12V
M66320 LE
DT
CLK
ST +5V
D.GND
RMC MUTE
MR CHECK
REMOCON
SR OUT
SR IN
BLUE
OSD DATA
OSD CLK
OSD SC
GUI IN
GUI (Y)
GUI (C)
AWZ5418:KP2001819L
AWZ5424 AND AWZ5431:KP2001816L
AWZ5430:KP2001812L
Q1: 2233 GUI/MONI
Q2: 2233 MR/SOURCE
Q3: 7952-A
Q4: 7952-B
Q5: 7951 MUTE
Q6: 7951 2
Q7: 7951 1
Q8: 2233 SUB
Q9: 2233 MAIN
Q10: 2234 GUI/MONI
Q11: 2234 GUI MUTE
Q12: 2233 MR MUTE
CONNECTION ASSY CN54(→ SCH-5)
SR&S.TERMINAL ASSY CN34 (→ SCH-2)
SR&S.TERMINAL ASSY CN12 (→ SCH-2)
SR ASSY (AWZ5433)
Q655: MIXER
VIDEO
Lch IN
Rch IN
VSX-D903S, VSX-D933S, VSX-D703S AND VSX-53 ONLY
Rch IN
A.GND
Lch IN
V.GND
VIDEO
A/V FUNCTION ASSY CN2 (→ SCH-5)
VIDEO FUNCTION ASSY CN3 (→ SCH-3)
F.VIDEO ASSY (AWZ5435)
SUB (OSD)
2234 SW2
2234 GUI/MONI
GUI (Y)
GUI (C)
2234 GUI MUTE
7951 MUTE
7951-2
7951-1
2233 MR MUTE
SUB VIDEO
ST +5V
D.GND
RMC MUTE
MR IN
REMOCON
SR OUT
SR IN
+12V
GND

**SCH-3**

VIDEO FUNCTION
ASSY,
SR ASSY,
F. VIDEO ASSY

SCH-3


:Video signal route
AWZ5424 AND AWZ5431 ONLY
ON SCREEN DISPLAY CIRCUIT
IC506
MM1067XD
(SYNC.SEPARATOR)
IC507
(OSD IC)
M50554-003SP
Q501
Q502
XDC124ES-T
Q510
XDC124ES-T
POWER-ON
RESET
Q503 2SC2458-T
OV-OFFSET
BUFFER
2SA1048-T
Q504
AWZ5431 ONLY
NJM2233BLA IC508
AWZ5418,
AWZ5424 AND
AWZ5431 ONLY
VIDEO OUT
(TV MONITOR)
PJ
BUFFER
AWZ5418 AND
AWZ5424 ONLY
AWZ5430
ONLY
AWZ5424 AND
AWZ5430 ONLY
AWZ5418
ONLY
AWZ5431
ONLY
AWZ5424
ONLY
AWZ5430 AND
AWZ5431 ONLY
IC1503
UPC78L05-T
IC503:
+5V REGULATOR
AWZ5431
ONLY
D507
1SS352
D508
1SS108
VCR1
REC OUT
Q506
2SA1115-T
BUFFER
VCR2
REC OUT
Q505
2SA1115-T
BUFFER
JP
ASSY
VSX-D703S,VSX-D603S,
VSX-D613S AND VSX-D633S ONLY
Q656,Q657:BUFFER
Q657 2SA1048-T
Q656
SR OUT
SR IN
MR RMC
AKN1020

VIDEO FUNCTION ASSY (AWZ5418:VSX-D903S AND VSX-D933S)
(AWZ5431:VSX-53)
(AWZ5424:VSX-D703S)
(AWZ5430:VSX-D603S,VSX-D613S AND VSX-D633S)

| | R548 |
|---|---|
| AWZ5424 | 270 |
| AWZ5418 | 220 |
| AWZ5431 | |

| | R1528 | C1503 |
|---|---|---|
| AWZ5418 | 0 | 47/25 |
| AWZ5431 | 100 | 47/10(NP) |

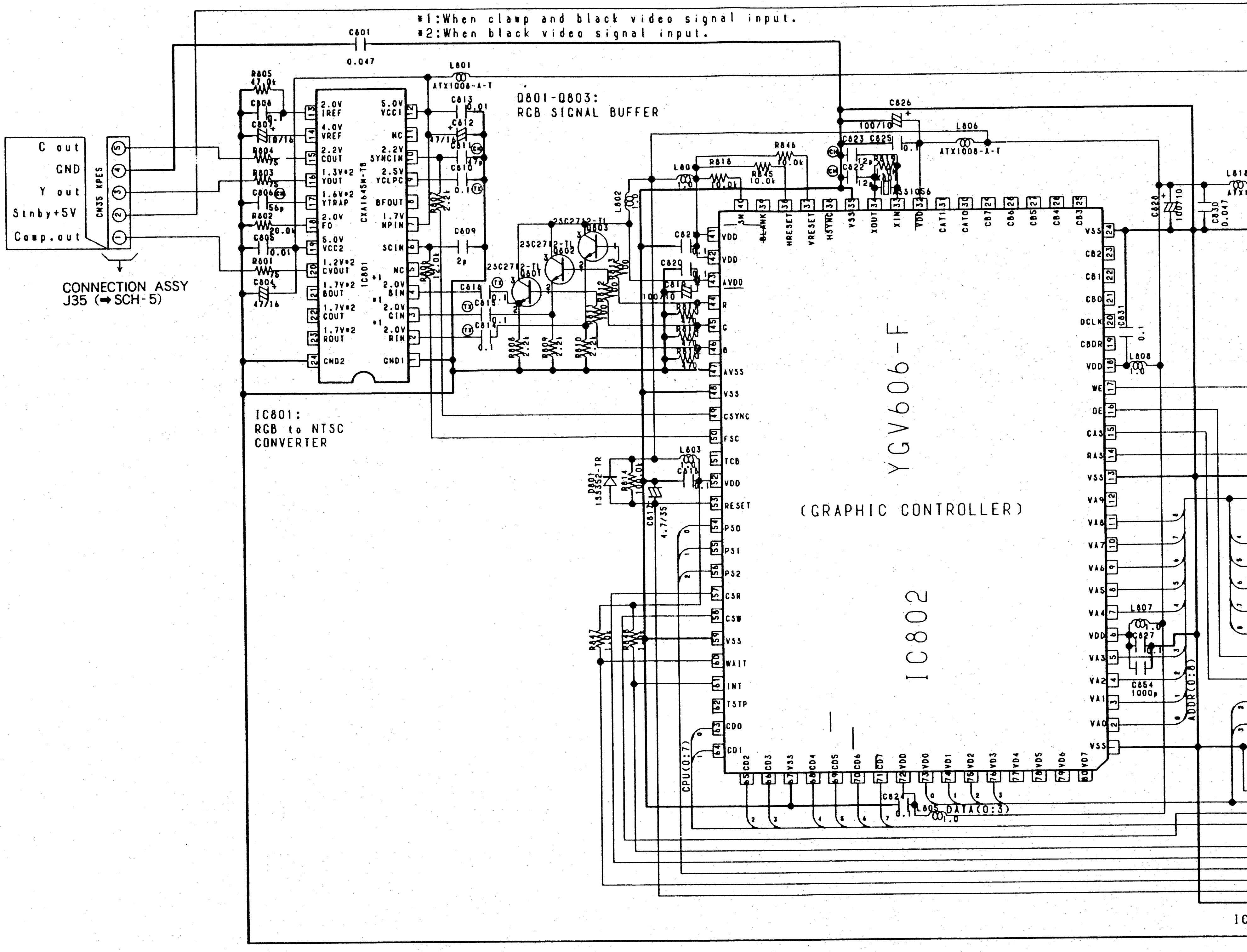
| | R542 | C561 |
|---|---|---|
| AWZ5424 | 330 | 470/6 |
| AWZ5430 | | |
| AWZ5418 | 220 | 470/10 |
| AWZ5431 | | |

DIODES
Other diodes (not noted) are HSS104-02

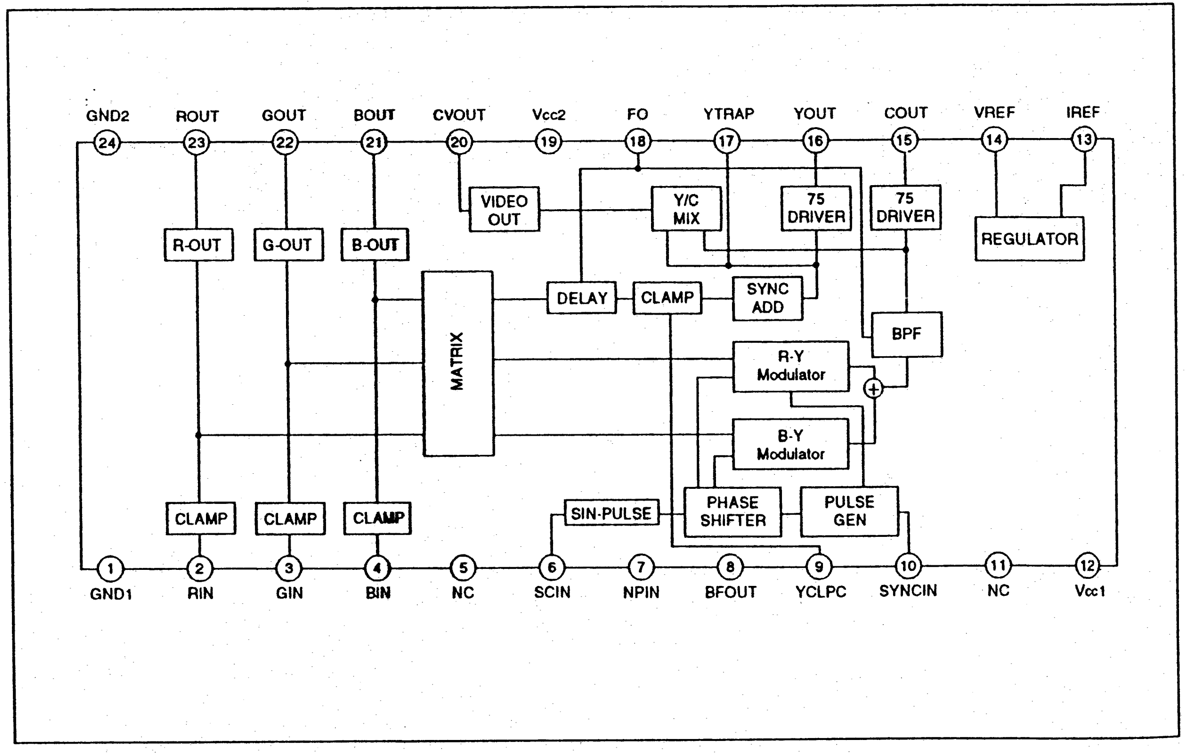
VIDEO FUNCTION
ASSY,
SR ASSY,
F. VIDEO ASSY

**SCH-3**

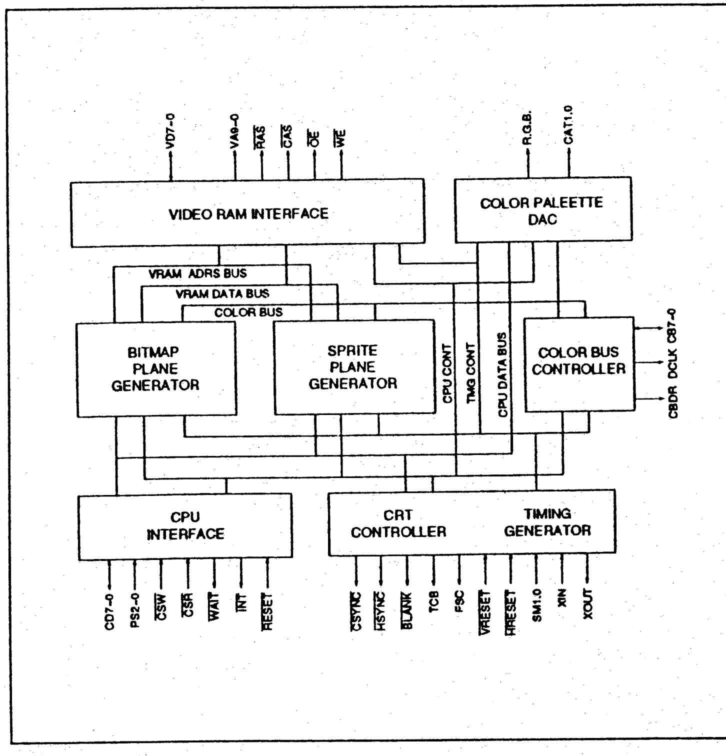
## 5.4 GUI ASSY


GUI ASSY(AWQ1025:VSX-D903S AND VSX-D933S ON
*1:When clamp and black video signal input.
*2:When black video signal input.
C801
0.047
L801
ATX1008-A-T
Q801-Q803:
RGB SIGNAL BUFFER
C out
GND
Y out
Stnby+5V
Comp.out
CN35 KPE5
CONNECTION ASSY
J35 (➡SCH-5)
IC801
CXA1645M-T6
IC801:
RGB to NTSC
CONVERTER
2SC2712-TL
Q801
Q802
Q803
D801
1SS352-TR
L802
L803
L804
L805
L806
ATX1008-A-T
L807
L808
C826
100/10
C854
1000p
YGV606-F
(GRAPHIC CONTROLLER)
IC802
CPU(0:7)
DATA(0:3)
ADDR(0:8)
X801

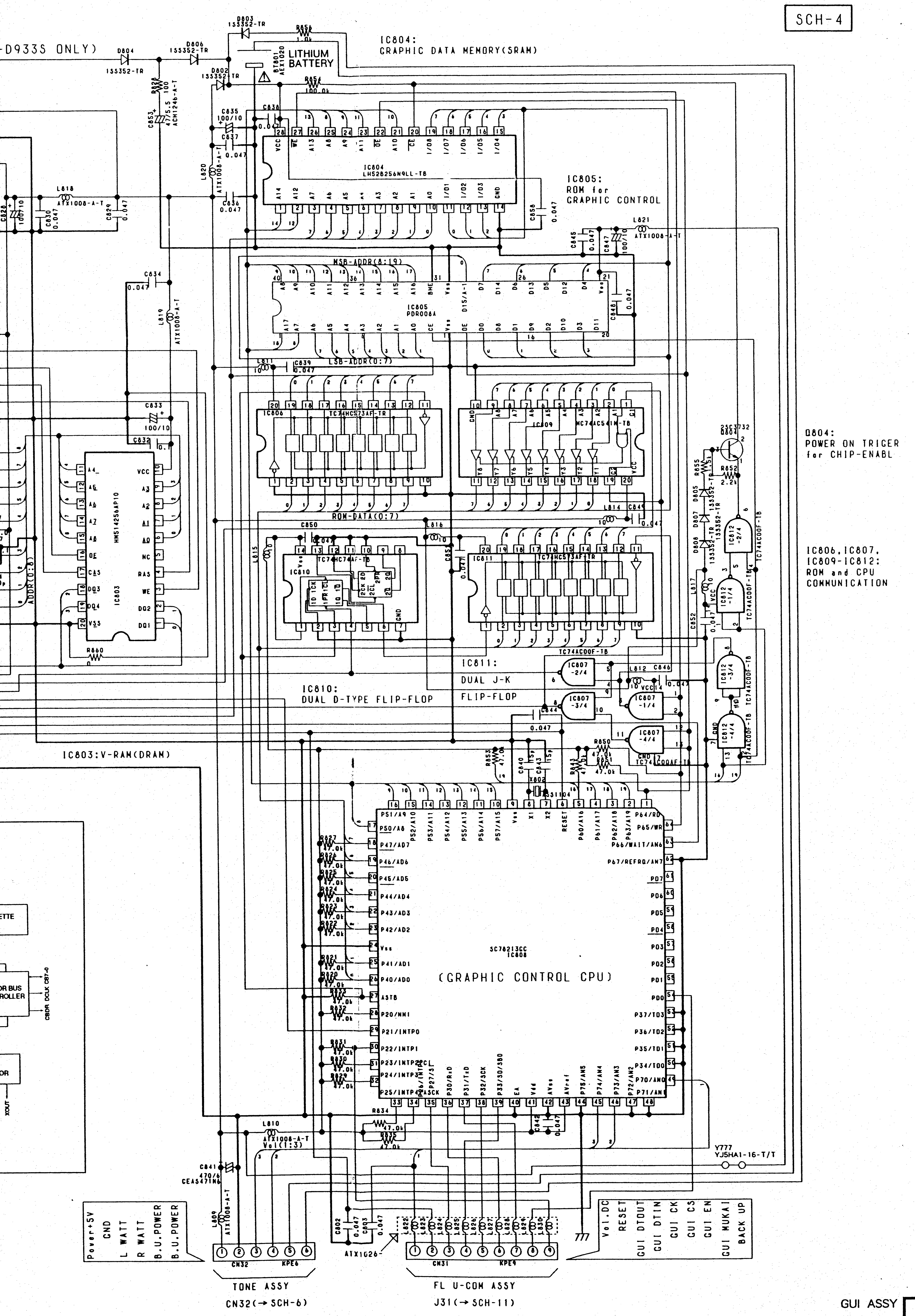
### IC801(CXA1645M)


GND2
ROUT
GOUT
BOUT
CVOUT
Vcc2
FO
YTRAP
YOUT
COUT
VREF
IREF
24
23
22
21
20
19
18
17
16
15
14
13
VIDEO OUT
Y/C MIX
75 DRIVER
75 DRIVER
REGULATOR
R-OUT
G-OUT
B-OUT
MATRIX
DELAY
CLAMP
SYNC ADD
BPF
R-Y Modulator
B-Y Modulator
CLAMP
CLAMP
CLAMP
SIN-PULSE
PHASE SHIFTER
PULSE GEN
1
2
3
4
5
6
7
8
9
10
11
12
GND1
RIN
GIN
BIN
NC
SCIN
NPIN
BFOUT
YCLPC
SYNCIN
NC
Vcc1

### IC802(YGV606-F)

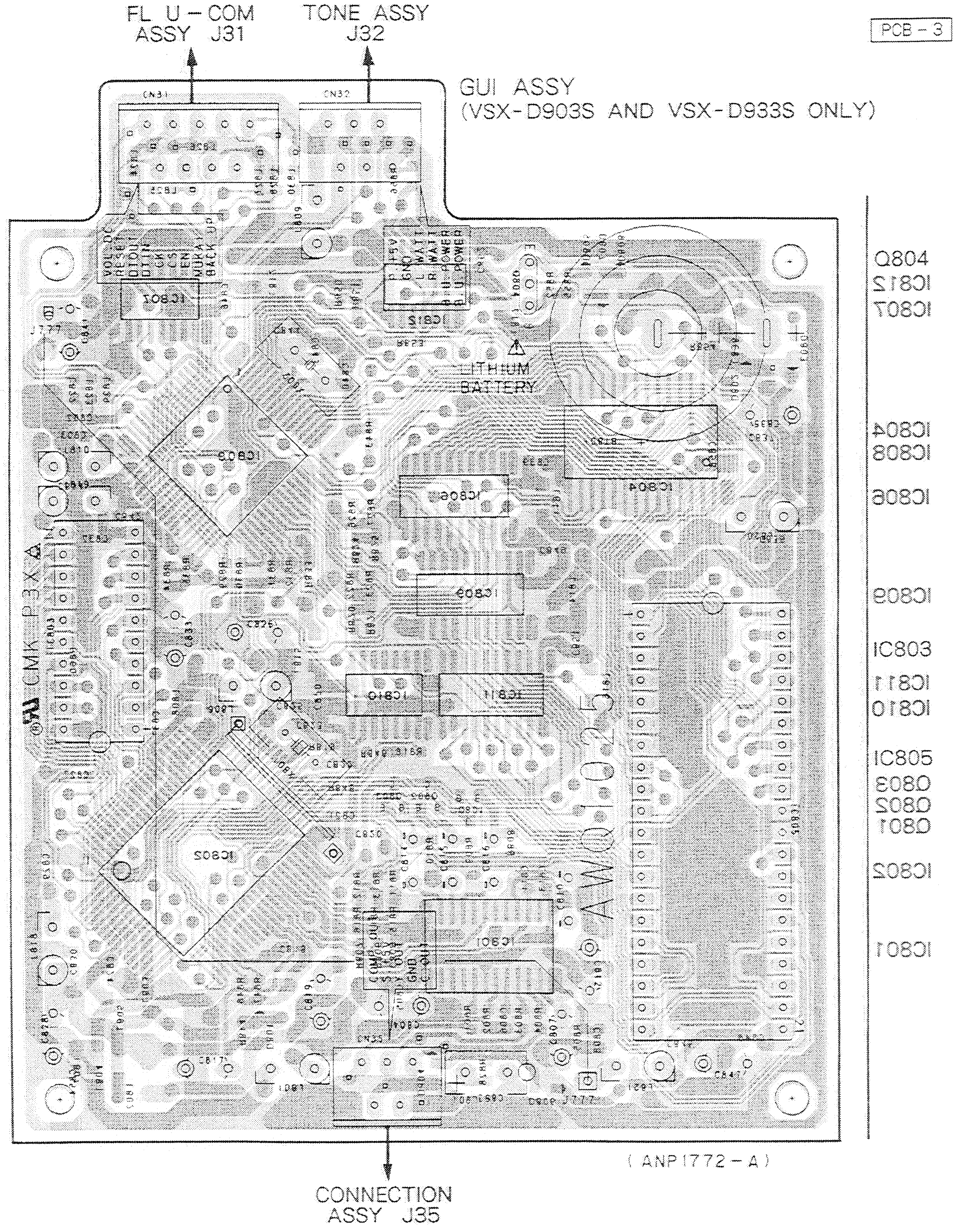

VD7-0
VA8-0
RAS
CAS
OE
WE
R,G,B,
CAT1,0
VIDEO RAM INTERFACE
COLOR PALEETTE DAC
VRAM ADRS BUS
VRAM DATA BUS
COLOR BUS
BITMAP PLANE GENERATOR
SPRITE PLANE GENERATOR
CPU CONT
TMG CONT
CPU DATA BUS
COLOR BUS CONTROLLER
CB7-0
DCLK
CBDR
CPU INTERFACE
CRT CONTROLLER
TIMING GENERATOR
CD7-0
PS2-0
CSW
CSR
WAIT
INT
RESET
CSYNC
HSYNC
BLANK
TCB
FSC
VRESET
HRESET
SM1,0
XIN
XOUT

SCH-4


-D933S ONLY)
LITHIUM BATTERY
BT801 AEX1020
D803 1SS352-TR
D804 1SS352-TR
D806 1SS352-TR
D802 1SS352-TR
R856 1.0k
R854 100.0k
IC804:
GRAPHIC DATA MEMORY(SRAM)
IC804 LH52B256N9LL-TB
IC805:
ROM for
GRAPHIC CONTROL
IC805 PDR008A
MSB-ADDR(8:19)
LSB-ADDR(0:7)
ROM-DATA(0:7)
IC806 TC74HC573AF-TR
IC809 TC74AC541M-TB
IC810 TC74HC74AF-TB
IC811 TC74HC573AF-TR
IC803 HM514256AP10
IC803:V-RAM(DRAM)
ADDR(0:8)
IC810:
DUAL D-TYPE FLIP-FLOP
IC811:
DUAL J-K
FLIP-FLOP
IC807 TC74AC00AF-TB
IC812 TC74AC00F-TB
Q804 2SC3732
IC808 SC78213CC
(GRAPHIC CONTROL CPU)
X802
Y777 YJ5HA1-16-T/T
L818 ATX1008-A-T
L819 ATX1008-A-T
L820 ATX1008-A-T
L821 ATX1008-A-T
L810 ATX1008-A-T
L809 ATX1008-A-T
ATX1026-
Vol(1:3)
C841 470/6 CEAS471M6
Power+5V
GND
L WATT
R WATT
B.U.POWER
B.U.POWER
CN32 KPE6
TONE ASSY
CN32(→ SCH-6)
CN31 KPE9
FL U-COM ASSY
J31(→ SCH-11)
Vol.DC
RESET
GUI DTOUT
GUI DTIN
GUI CK
GUI CS
GUI EN
GUI MUKAI
BACK UP
ETTE
OR BUS
ROLLER
OR
Q804:
POWER ON TRIGER
for CHIP-ENABL
IC806, IC807,
IC809-IC812:
ROM and CPU
COMMUNICATION

A
B
C
D
E
F

GUI ASSY **SCH-4**


FL U-COM
ASSY J31
TONE ASSY
J32
PCB-3
GUI ASSY
(VSX-D903S AND VSX-D933S ONLY)
LITHIUM
BATTERY
Q804
IC812
IC807
IC804
IC808
IC806
IC809
IC803
IC811
IC810
IC805
Q803
Q802
Q801
IC802
IC801
(ANP1772-A)
CONNECTION
ASSY J35

- This diagram is viewed from the pink colored foil side.
- This PCB is double sided.

A

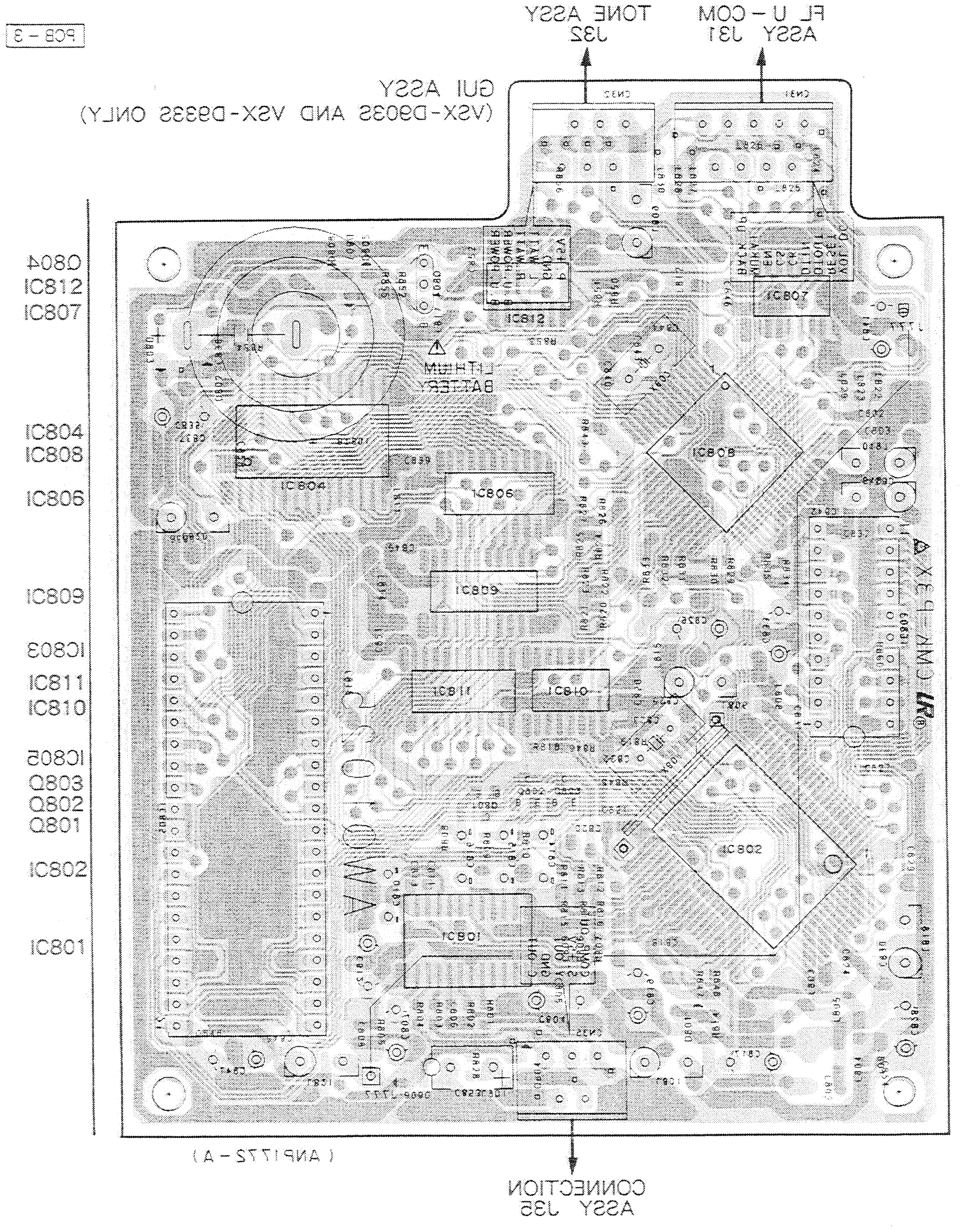
A

B

B

C

C

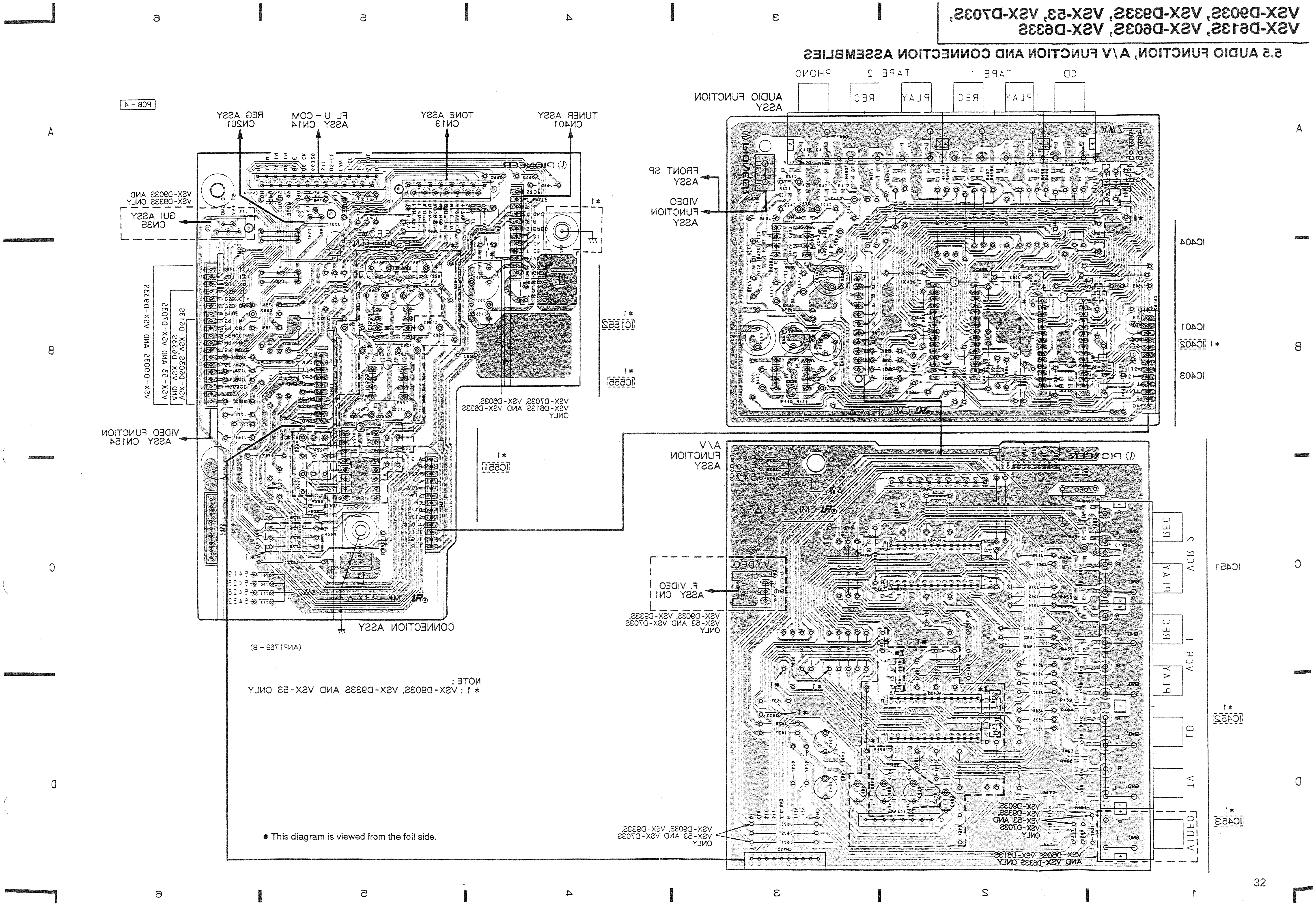


D

D

- This diagram is viewed from the gray colored foil side.
- This PCB is double sided.

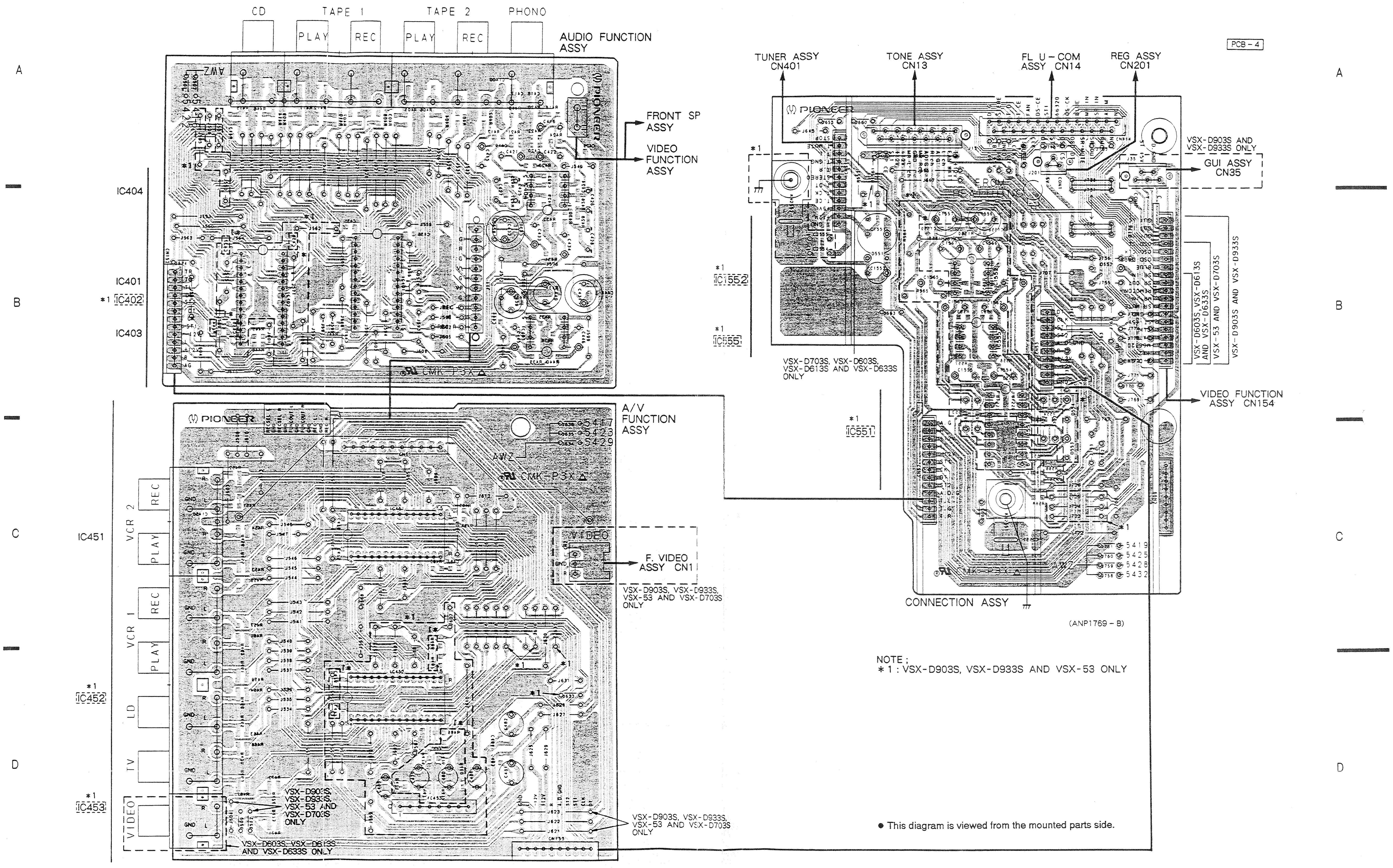
## 5.5 AUDIO FUNCTION, A/V FUNCTION AND CONNECTION ASSEMBLIES


PCB - 4
REG ASSY CN201
FL U-COM ASSY CN14
TONE ASSY CN13
TUNER ASSY CN401
VSX-D903S AND VSX-D933S ONLY
GUI ASSY CN35
VSX-D903S AND VSX-D933S, VSX-53 AND VSX-D903S, VSX-D933S, VSX-D913S
VIDEO FUNCTION ASSY CN154
VSX-D703S, VSX-D603S, VSX-D613S AND VSX-D633S ONLY
*1 IC552
*1 IC555
*1 IC551
CONNECTION ASSY
(ANP1769 - B)
CD
TAPE 1
PLAY
REC
TAPE 2
PHONO
AUDIO FUNCTION ASSY
FRONT SP ASSY
VIDEO FUNCTION ASSY
IC404
IC401
*1 IC402
IC403
A/V FUNCTION ASSY
F. VIDEO ASSY CN1
VSX-D903S, VSX-D933S, VSX-53 AND VSX-D703S ONLY
VCR 2
VCR 1
REC
PLAY
LD
TV
VIDEO
IC451
*1 IC452
*1 IC453
VSX-D903S, VSX-D933S, VSX-53 AND VSX-D703S ONLY
VSX-D603S, VSX-D613S AND VSX-D633S ONLY
A
B
C
D
1
2
3
4
5
6

NOTE ;
*1 : VSX-D903S, VSX-D933S AND VSX-53 ONLY

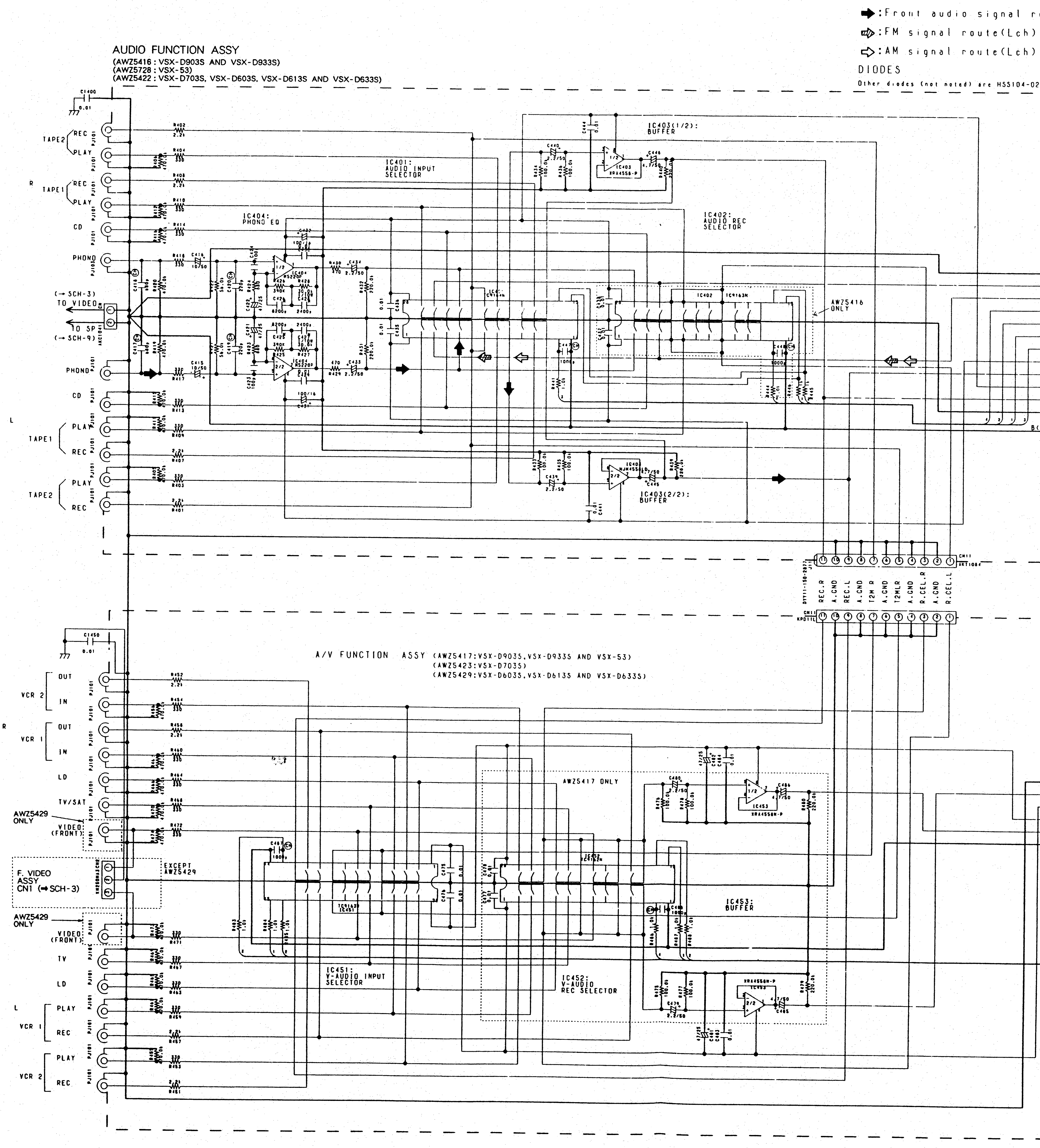
● This diagram is viewed from the foil side.

## 5.5 AUDIO FUNCTION, A/V FUNCTION AND CONNECTION ASSEMBLIES


CD
TAPE 1
TAPE 2
PHONO
PLAY
REC
PLAY
REC
AUDIO FUNCTION ASSY
FRONT SP ASSY
VIDEO FUNCTION ASSY
IC404
IC401
*1 IC402
IC403
A/V FUNCTION ASSY
5417
5423
5429
AWZ
CMK-P3X
IC451
VCR 2
REC
PLAY
VCR 1
REC
PLAY
LD
TV
VIDEO
*1 IC452
*1 IC453
VIDEO
F. VIDEO ASSY CN1
VSX-D903S, VSX-D933S, VSX-53 AND VSX-D703S ONLY
VSX-D903S, VSX-D933S, VSX-53 AND VSX-D703S ONLY
VSX-D903S, VSX-D933S, VSX-53 AND VSX-D703S ONLY
VSX-D603S, VSX-D613S AND VSX-D633S ONLY
PCB-4
TUNER ASSY CN401
TONE ASSY CN13
FL U-COM ASSY CN14
REG ASSY CN201
VSX-D903S AND VSX-D933S ONLY
GUI ASSY CN35
*1 IC552
*1 IC555
*1 IC551
VSX-D703S, VSX-D603S, VSX-D613S AND VSX-D633S ONLY
VSX-D603S, VSX-D613S AND VSX-D633S
VSX-53 AND VSX-D703S
VSX-D903S AND VSX-D933S
VIDEO FUNCTION ASSY CN154
5419
5425
5428
5432
MK-P3X
AWZ
CONNECTION ASSY
(ANP1769 - B)
A
B
C
D
1
2
3
4
5
6

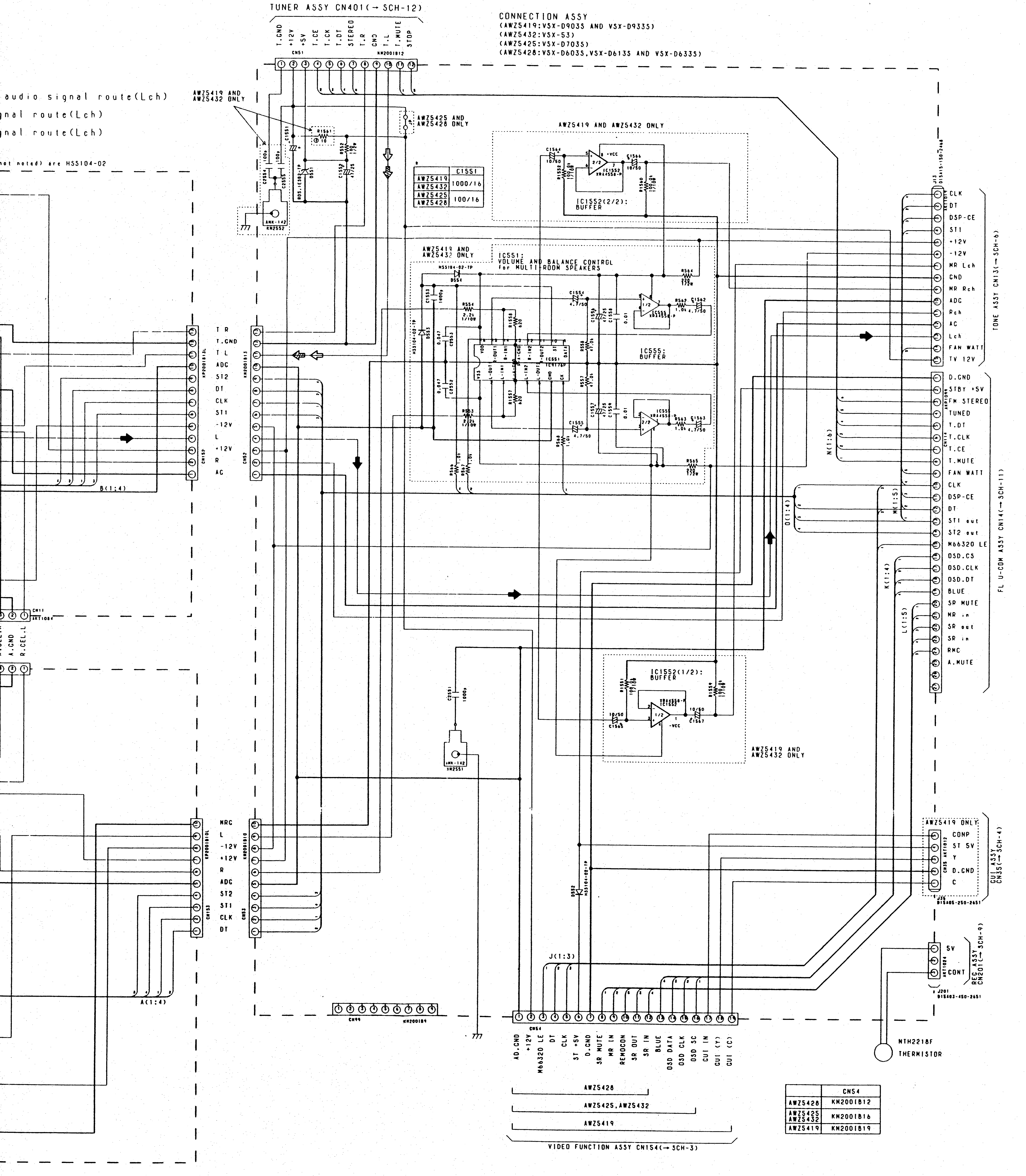
NOTE ;
∗1 : VSX-D903S, VSX-D933S AND VSX-53 ONLY

- This diagram is viewed from the mounted parts side.

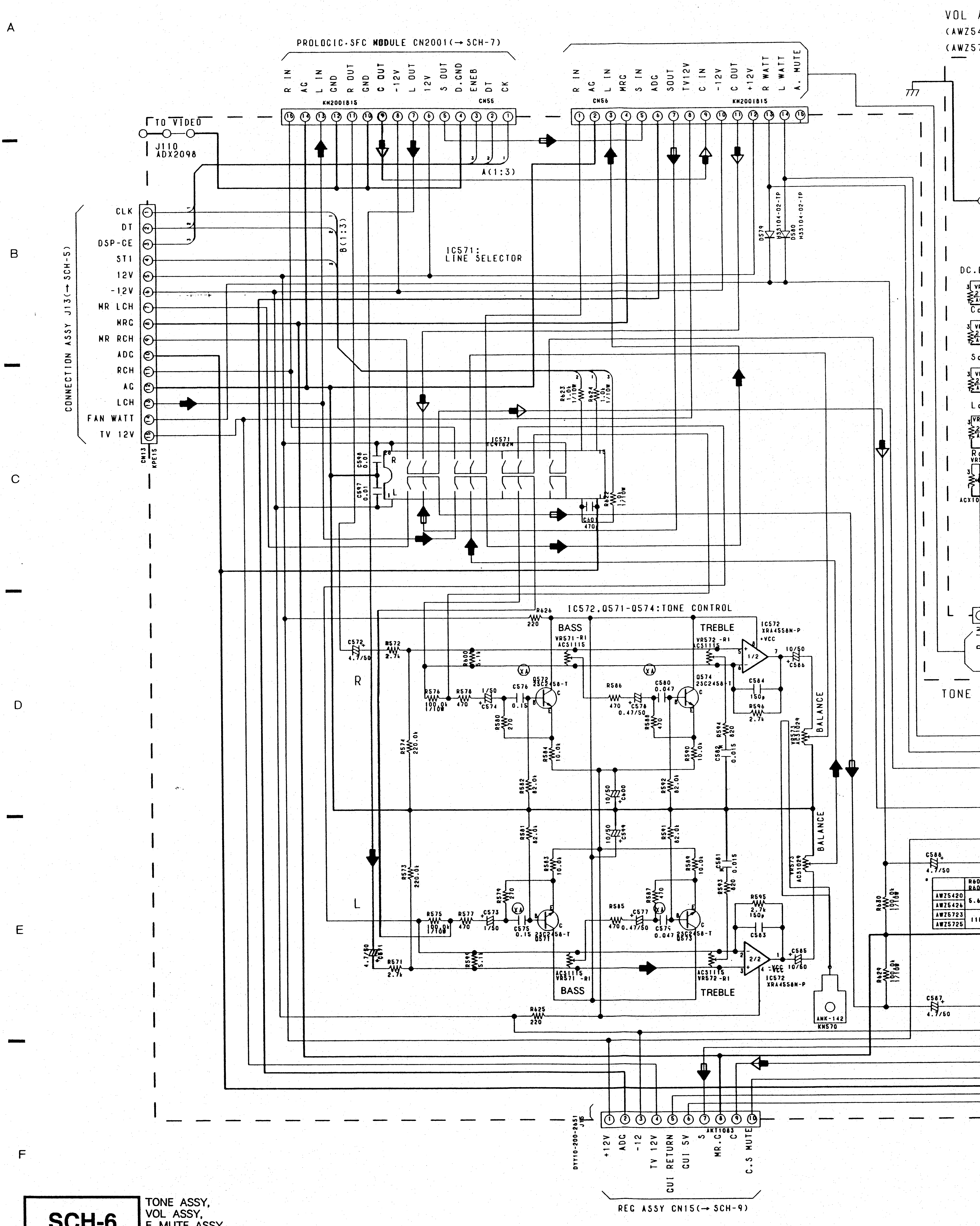

:Front audio signal r
:FM signal route(Lch)
:AM signal route(Lch)
DIODES
Other diodes (not noted) are HSS104-02
AUDIO FUNCTION ASSY
(AWZ5416 : VSX-D903S AND VSX-D933S)
(AWZ5728 : VSX-53)
(AWZ5422 : VSX-D703S, VSX-D603S, VSX-D613S AND VSX-D633S)
TAPE2 REC
PLAY
R
TAPE1 REC
PLAY
CD
PHONO
(→ SCH-3)
TO VIDEO
TO SP
(→ SCH-9)
PHONO
CD
L
TAPE1 PLAY
REC
TAPE2 PLAY
REC
IC401:
AUDIO INPUT
SELECTOR
IC404:
PHONO EQ
IC403(1/2):
BUFFER
IC402:
AUDIO REC
SELECTOR
AWZ5416
ONLY
IC403(2/2):
BUFFER
REC.R
A.GND
REC.L
A.GND
T2M R
T2MLR
A.GND
R.CEL.R
A.GND
R.CEL.L
A/V FUNCTION ASSY (AWZ5417:VSX-D903S,VSX-D933S AND VSX-53)
(AWZ5423:VSX-D703S)
(AWZ5429:VSX-D603S,VSX-D613S AND VSX-D633S)
VCR 2 OUT
IN
R
VCR 1 OUT
IN
LD
TV/SAT
AWZ5429
ONLY
VIDEO
(FRONT)
F. VIDEO
ASSY
CN1 (➡SCH-3)
EXCEPT
AWZ5429
AWZ5429
ONLY
VIDEO
(FRONT)
TV
LD
L
VCR 1 PLAY
REC
VCR 2 PLAY
REC
AWZ5417 ONLY
IC451:
V-AUDIO INPUT
SELECTOR
IC452:
V-AUDIO
REC SELECTOR
IC453:
BUFFER

**SCH-5**

AUDIO FUNCTION ASSY,
A/V FUNCTION ASSY,
CONNECTION ASSY


TUNER ASSY CN401(→ SCH-12)
T.GND
+12V
+5V
T.CE
T.CK
T.DT
STEREO
T.R
GND
T.L
T.MUTE
STOP
CN51
KN2001B12
CONNECTION ASSY
(AWZ5419:VSX-D903S AND VSX-D933S)
(AWZ5432:VSX-53)
(AWZ5425:VSX-D703S)
(AWZ5428:VSX-D603S,VSX-D613S AND VSX-D633S)
audio signal route(Lch)
gnal route(Lch)
gnal route(Lch)
not noted) are HSS104-02
AWZ5419 AND AWZ5432 ONLY
AWZ5425 AND AWZ5428 ONLY
AWZ5419 AND AWZ5432 ONLY
C1551
AWZ5419 / AWZ5432: 1000/16
AWZ5425 / AWZ5428: 100/16
IC1552(2/2): BUFFER
AWZ5419 AND AWZ5432 ONLY
IC551: VOLUME AND BALANCE CONTROL for MULTI-ROOM SPEAKERS
IC555: BUFFER
ANK-142
KN2552
T R
T.GND
T L
ADC
ST2
DT
CLK
ST1
-12V
L
+12V
R
AC
CN152
CN52
KP200181L
KN200181
B(1:4)
CN11
AKT1084
A.GND
R.CEL.L
MRC
L
-12V
+12V
R
ADC
ST2
ST1
CLK
DT
CN153
CN53
KP200181OL
KN2001B10
A(1:4)
IC1552(1/2): BUFFER
AWZ5419 AND AWZ5432 ONLY
C2551 1000p
ANK-142
KN2551
CLK
DT
DSP-CE
ST1
+12V
-12V
MR Lch
GND
MR Rch
ADC
Rch
AC
Lch
FAN WATT
TV 12V
TONE ASSY CN13(→ SCH-6)
D.GND
STBY +5V
FM STEREO
TUNED
T.DT
T.CLK
T.CE
T.MUTE
FAN WATT
CLK
DSP-CE
DT
ST1 out
ST2 out
M66320 LE
OSD.CS
OSD.CLK
OSD.DT
BLUE
SR MUTE
MR in
SR out
SR in
RMC
A.MUTE
FL U-COM ASSY CN14(→ SCH-11)
N(1:6)
M(1:5)
D(1:4)
K(1:4)
L(1:5)
AWZ5419 ONLY
COMP
ST 5V
Y
D.GND
C
GUI ASSY CN35(→ SCH-4)
5V
CONT
REG ASSY CN201(→ SCH-9)
NTH2218F THERMISTOR
J(1:3)
CN99
KN200189
CN54
AD.GND
+12V
M66320 LE
DT
CLK
ST +5V
D.GND
SR MUTE
MR IN
REMOCON
SR OUT
SR IN
BLUE
OSD DATA
OSD CLK
OSD SC
GUI IN
GUI (Y)
GUI (C)
AWZ5428
AWZ5425,AWZ5432
AWZ5419
VIDEO FUNCTION ASSY CN154(→ SCH-3)
CN54
AWZ5428: KN2001B12
AWZ5425 / AWZ5432: KN2001B16
AWZ5419: KN2001B19

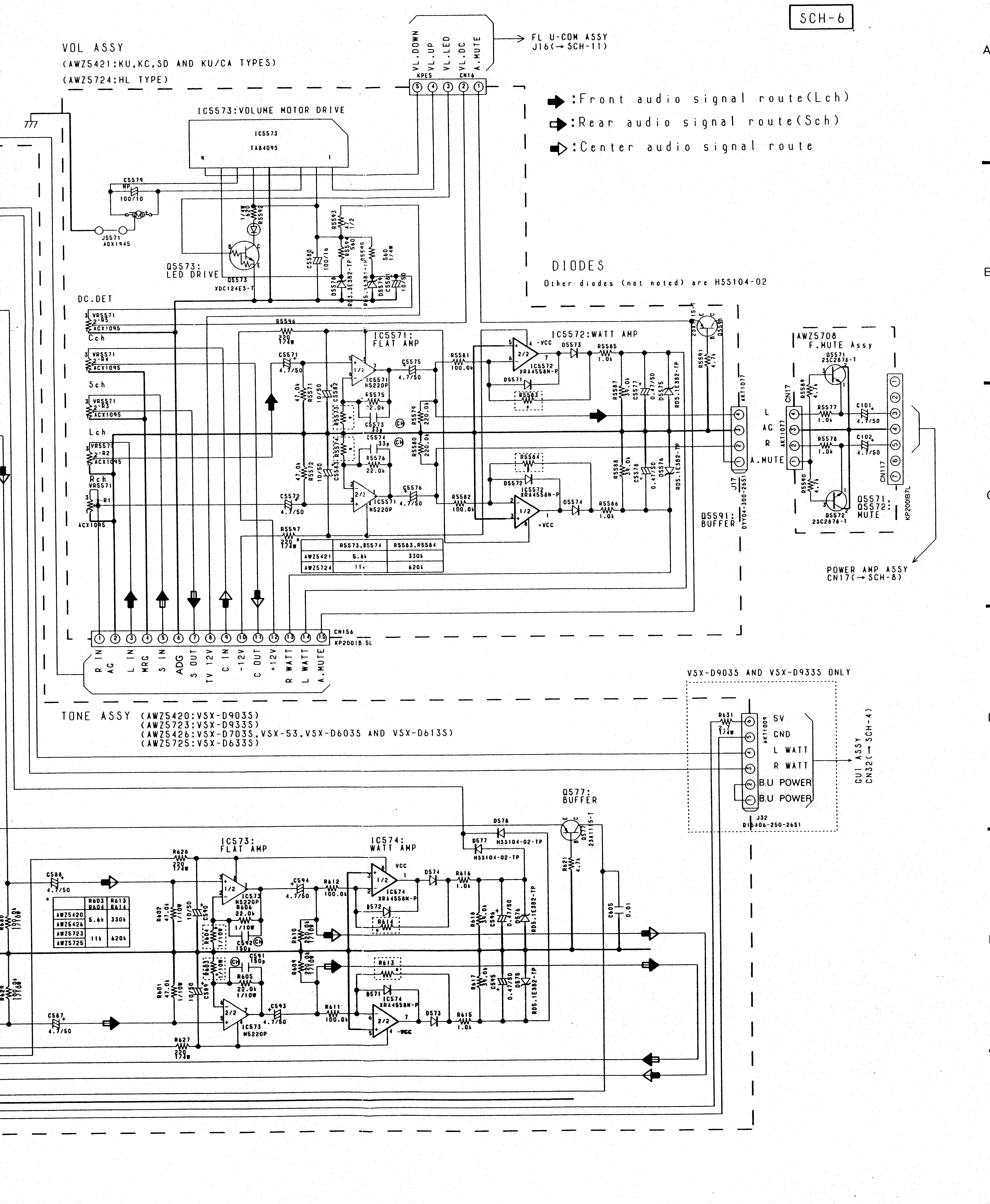
## 5.6 TONE, VOL AND F. MUTE ASSEMBLIES


A
B
C
D
E
F
PROLOGIC·SFC MODULE CN2001(→SCH-7)
R IN
AG
L IN
GND
R OUT
GND
C OUT
-12V
L OUT
12V
S OUT
D.GND
ENEB
DT
CK
KN2001815
CN55
CN56
KN2001815
R IN
AG
L IN
MRC
S IN
ADG
SOUT
TV12V
C IN
-12V
C OUT
+12V
R WATT
L WATT
A. MUTE
TO VIDEO
J110
ADX2098
A(1:3)
B(1:3)
IC571:
LINE SELECTOR
D579
D580
H33104-02-TP
CONNECTION ASSY J13(→SCH-5)
CLK
DT
DSP-CE
ST1
12V
-12V
MR LCH
MRC
MR RCH
ADC
RCH
AG
LCH
FAN WATT
TV 12V
CN13
KPE15
R623 1.0k 1/10W
R624 1.0k 1/10W
IC571 TC4162N
C598 0.01
C597 0.01
R
L
C601 470
R622 1/10W
IC572,Q571-Q574:TONE CONTROL
R626 220
BASS
VR571-R1 ACS1115
TREBLE
VR572-R1 ACS1115
IC572 XRA4558N-P
+VCC
1/2
10/50
C586
C572 4.7/50
R572 2.7k
R600 5.1k
Q572 2SC2458-T
Q574 2SC2458-T
R576 100.0k 1/10W
R578 470
1/50 C574
C576 0.15
R586 470
C578 0.47/50
C580 0.047
C584 150p
R596 2.7k
R580 270
R588 470
R584 10.0k
R590 10.0k
R594 620
C582 0.015
BALANCE
VR573 ACS1029
R574 220.0k
R582 82.0k
R592 82.0k
10/50 C600
10/50 C599
R581 82.0k
R591 82.0k
R583 10.0k
R589 10.0k
C581 0.015
R593 620
R573 220.0k
R579 270
R587 470
R595 2.7k
150p
C583
R575 100.0k 1/10W
R577 470
C573 1/50
C575 0.15
Q571 2SC2458-T
R585 470
C577 0.47/50
C579 0.047
Q573 2SC2458-T
2/2
-VCC
C585 10/50
IC572 XRA4558N-P
C571 4.7/50
R571 2.7k
R599 5.1k
ACS1115 VR571-R1
BASS
ACS1115 VR572-R1
TREBLE
R625 220
ANK-142
KN570
VOL A
(AWZ54
(AWZ57
DC.
TONE
C588 4.7/50
R630 100.0k 1/10W
R629 100.0k 1/10W
C587 4.7/50
AWZ5420
AWZ5426
AWZ5723
AWZ5725
ACX10
DYY10-200-2651
J15
AKT1083
+12V
ADC
-12
TV 12V
GUI RETURN
GUI 5V
S
MR.C
C
C.S MUTE
REG ASSY CN15(→SCH-9)

**SCH-6**

TONE ASSY,
VOL ASSY,
F. MUTE ASSY

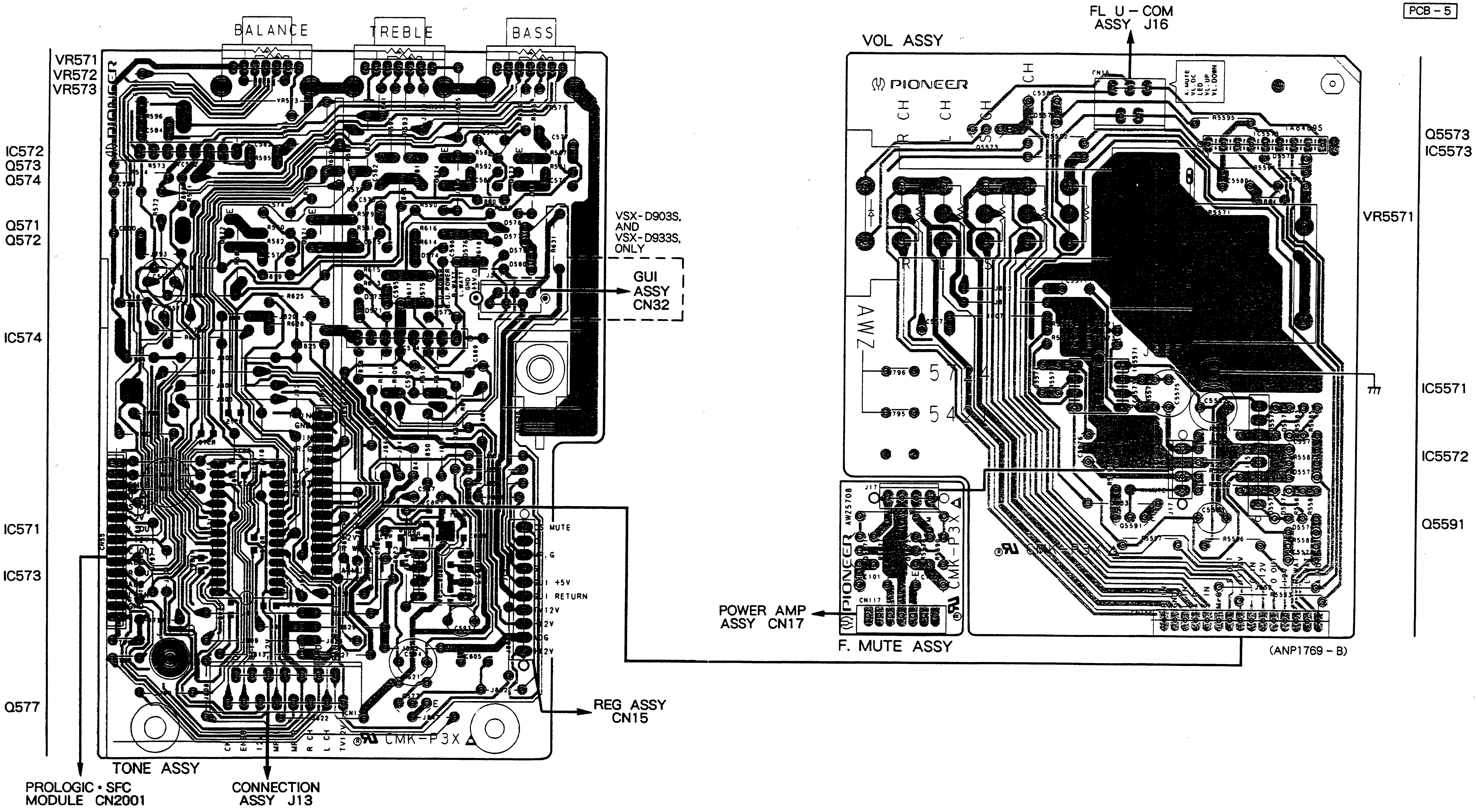
SCH-6


VOL ASSY
(AWZ5421:KU,KC,SD AND KU/CA TYPES)
(AWZ5724:HL TYPE)
IC5573:VOLUME MOTOR DRIVE
IC5573
TA8409S
C5579
100/10
J5571
ADX1945
Q5573:
LED DRIVE
Q5573
XDC124ES-T
R5592
R5593
R5594
R5595
C5580
100/16
D5578
D5579
C5581
10/50
DC.DET
VR5571
ACX1095
Cch
Sch
Lch
Rch
R5596
C5571
4.7/50
IC5571:
FLAT AMP
IC5571
NS220P
C5575
4.7/50
R5575
22.0k
C5573
33p
C5574
33p
R5576
22.0k
C5576
4.7/50
C5572
4.7/50
R5571
47.0k
R5572
47.0k
C5582
C5583
R5579
220.0k
R5580
220.0k
R5581
100.0k
R5582
100.0k
R5597
IC5572:WATT AMP
IC5572
XRA4558N-P
D5573
D5574
R5585
1.0k
R5586
1.0k
D5571
D5572
R5583
R5584
R5587
39.0k
R5588
39.0k
C5577
0.47/50
C5578
0.47/50
D5575
D5576
RD5.1ES82-TP
Q5591
2SA1115-T
R5591
4.7k
Q5591:
BUFFER
J17
DTY04-300-2651
AKT1077
L
AG
R
A.MUTE
RS573,RS574
RS583,RS584
AWZ5421
5.6k
330k
AWZ5724
11k
620k
CN156
KP200IB.5L
R IN
AG
L IN
MRG
S IN
ADG
S OUT
TV 12V
C IN
-12V
C OUT
+12V
R WATT
L WATT
A.MUTE
VL.DOWN
VL.UP
VL.LED
VL.DC
A.MUTE
KPE5
CN16
FL U-COM ASSY
J16(→ SCH-11)
:Front audio signal route(Lch)
:Rear audio signal route(Sch)
:Center audio signal route
DIODES
Other diodes (not noted) are HSS104-02
AWZ5708
F.MUTE Assy
Q5571
2SC2878-T
Q5572
2SC2878-T
R5589
4.7k
R5590
4.7k
R5577
1.0k
R5578
1.0k
C101
4.7/50
C102
4.7/50
CN17
AKT1077
CN117
KP200IB7L
Q5571,
Q5572:
MUTE
POWER AMP ASSY
CN17(→ SCH-8)
TONE ASSY (AWZ5420:VSX-D903S)
(AWZ5723:VSX-D933S)
(AWZ5426:VSX-D703S,VSX-53,VSX-D603S AND VSX-D613S)
(AWZ5725:VSX-D633S)
VSX-D903S AND VSX-D933S ONLY
R631
220
1/4W
AKT1009
5V
GND
L WATT
R WATT
B.U POWER
B.U POWER
J32
D1BA06-250-2651
GUI ASSY
CN32(→ SCH-4)
Q577:
BUFFER
Q577
2SA1115-T
R621
4.7k
C605
0.01
D578
D577
HSS104-02-TP
IC573:
FLAT AMP
IC573
NS220P
IC574:
WATT AMP
IC574
XRA4558N-P
VCC
-VCC
C586
4.7/50
C587
4.7/50
R628
220
1/4W
R627
220
1/4W
R603 R613
R604 R614
AWZ5420
5.6k
330k
AWZ5426
AWZ5723
11k
620k
AWZ5725
R602
47.0k
R601
47.0k
C590
10/50
C589
10/50
R606
22.0k
R605
22.0k
C592
150p
C591
150p
C594
4.7/50
C593
4.7/50
R612
100.0k
R611
100.0k
R610
R609
D574
D573
D572
D571
R614
R613
R616
1.0k
R615
1.0k
R618
39.0k
R617
39.0k
C596
0.47/50
C595
0.47/50
D576
D575
RD5.1ES82-TP

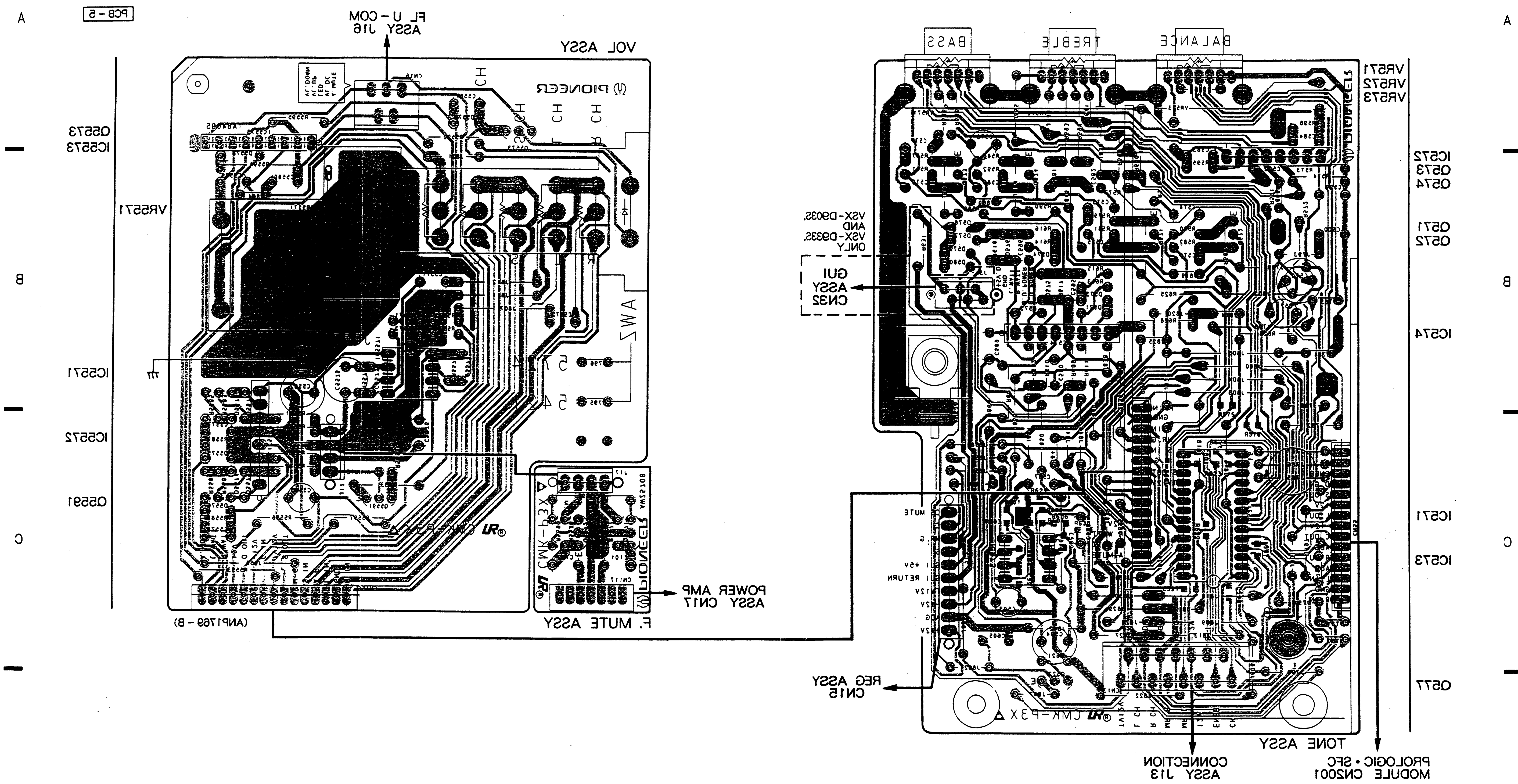
TONE ASSY,
VOL ASSY,
F. MUTE ASSY

**SCH-6**

PCB-5


BALANCE
TREBLE
BASS
VR571
VR572
VR573
IC572
Q573
Q574
Q571
Q572
IC574
IC571
IC573
Q577
VSX-D903S, AND VSX-D933S, ONLY
GUI ASSY CN32
MUTE
+5V
RETURN
REG ASSY CN15
TONE ASSY
PROLOGIC • SFC MODULE CN2001
CONNECTION ASSY J13
CMK-P3X
PIONEER
FL U-COM ASSY J16
VOL ASSY
R CH
L CH
S CH
C CH
AWZ
Q5573
IC5573
VR5571
IC5571
IC5572
Q5591
POWER AMP ASSY CN17
F. MUTE ASSY
AWZ5708
(ANP1769 - B)

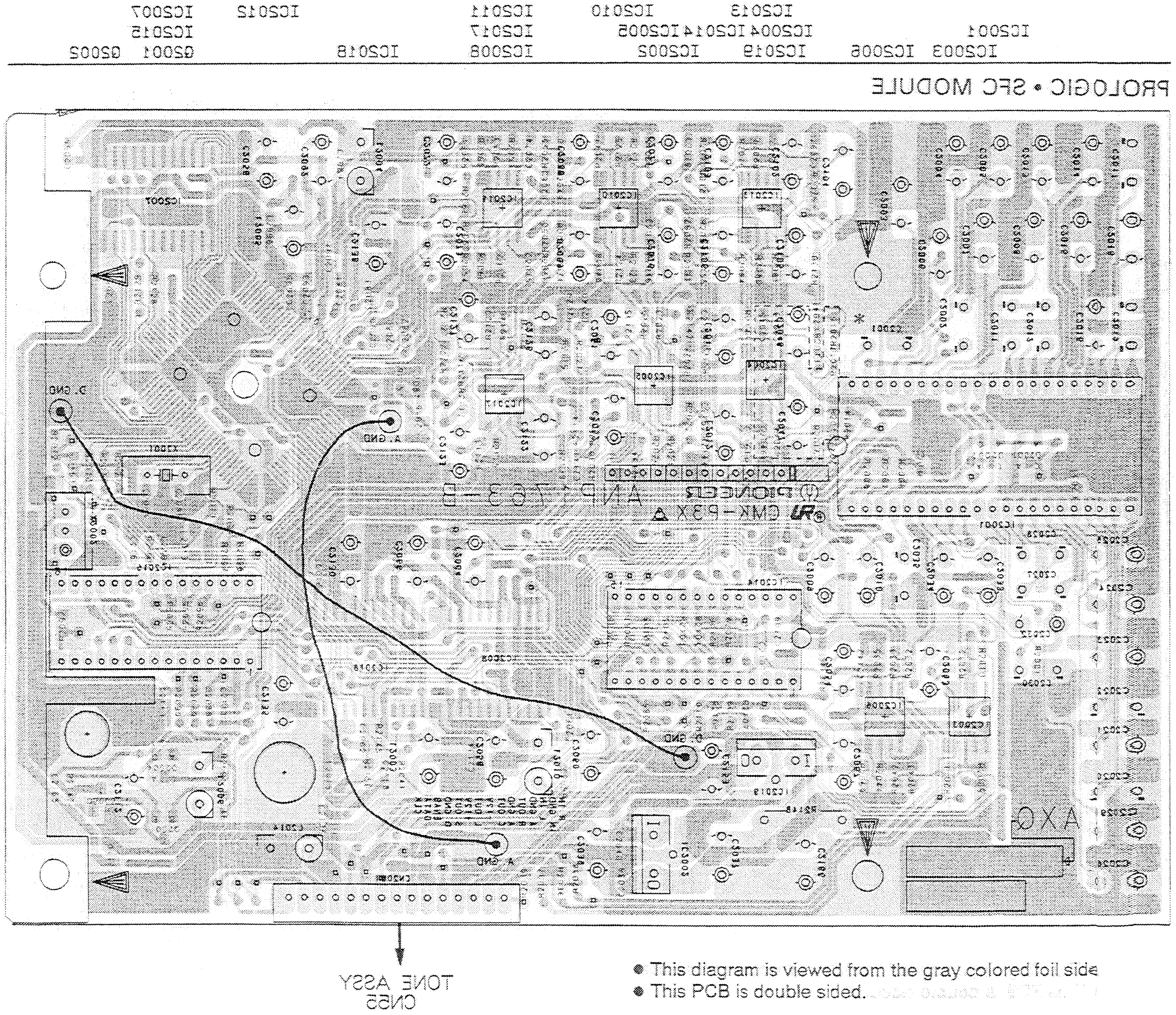
• This diagram is viewed from the mounted parts side.


A
B
C
D
PCB - 5
FL U - COM
ASSY J16
VOL ASSY
PIONEER
Q5573
IC5573
VR5571
IC5571
IC5572
Q5591
(ANP1769 - B)
F. MUTE ASSY
POWER AMP
ASSY CN17
VSX-D903S,
AND
VSX-D933S,
ONLY
GUI
ASSY
CN32
REG ASSY
CN15
BASS
TREBLE
BALANCE
VR571
VR572
VR573
IC572
Q573
Q574
Q571
Q572
IC574
IC571
IC573
Q577
TONE ASSY
PROLOGIC • SFC
MODULE CN2001
CONNECTION
ASSY J13

- This diagram is viewed from the foil side.

## 5.7 PROLOGIC • SFC MODULE

PCB-6


IC2001
IC2003 IC2006
IC2013
IC2004 IC2014 IC2005
IC2019 IC2002
IC2010
IC2011
IC2017
IC2008
IC2018
IC2012
IC2007
IC2015
Q2001 Q2002
PROLOGIC • SFC MODULE
D.GND
A.GND
PIONEER
ANP1763-B
GMK-P3X
TONE ASSY
CN55

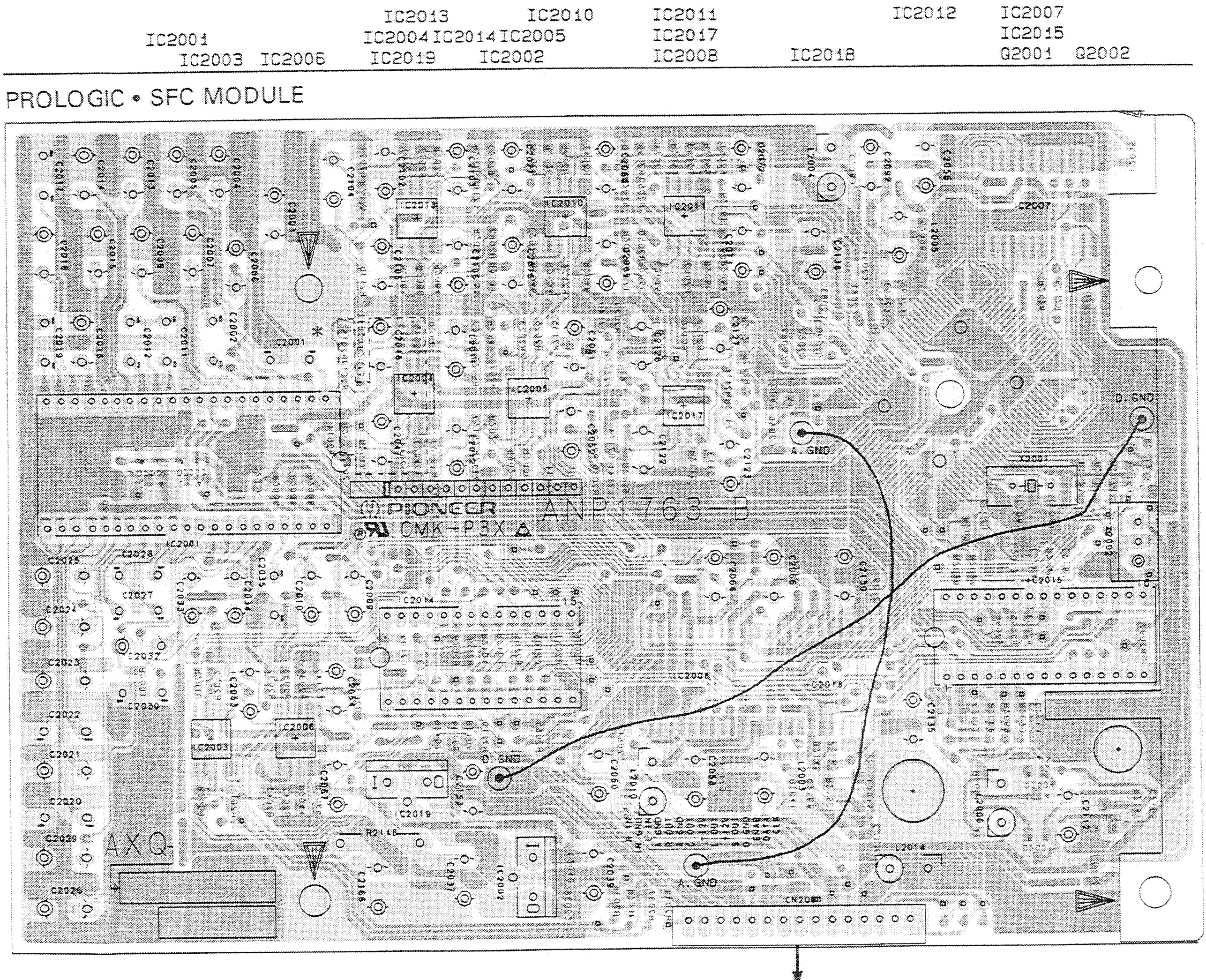
- This diagram is viewed from the gray colored foil side
- This PCB is double sided.

NOTE : Parts marked * are replaced as follows.
(PCB diagram shows for VSX-D703S, VSX-D603S, VSX-D613S and VSX-D633S.)

| VSX-D703S, VSX-D603S, VSX-D613S AND VSX-D633S | VSX-D903S, VSX-D933S AND VSX-53 |
|---|---|
| R2015 | C2169 |
| R2016 | C2170 |
| R2017 | C2171 |
| R2018 | C2172 |
| C2043 | R2152 |
| C2044 | R2153 |
| C2045 | R2154 |
| C2046 | R2155 |

## 5.7 PROLOGIC • SFC MODULE

PCB-6


IC2013
IC2010
IC2011
IC2012
IC2007
IC2001
IC2004
IC2014
IC2005
IC2017
IC2015
IC2003
IC2006
IC2019
IC2002
IC2008
IC2018
Q2001
Q2002
PROLOGIC • SFC MODULE
PIONEER
ANP1763-B
CMK-P3X
A. GND
D. GND
X2001
CN2001
AXQ
*

TONE ASSY
CN55

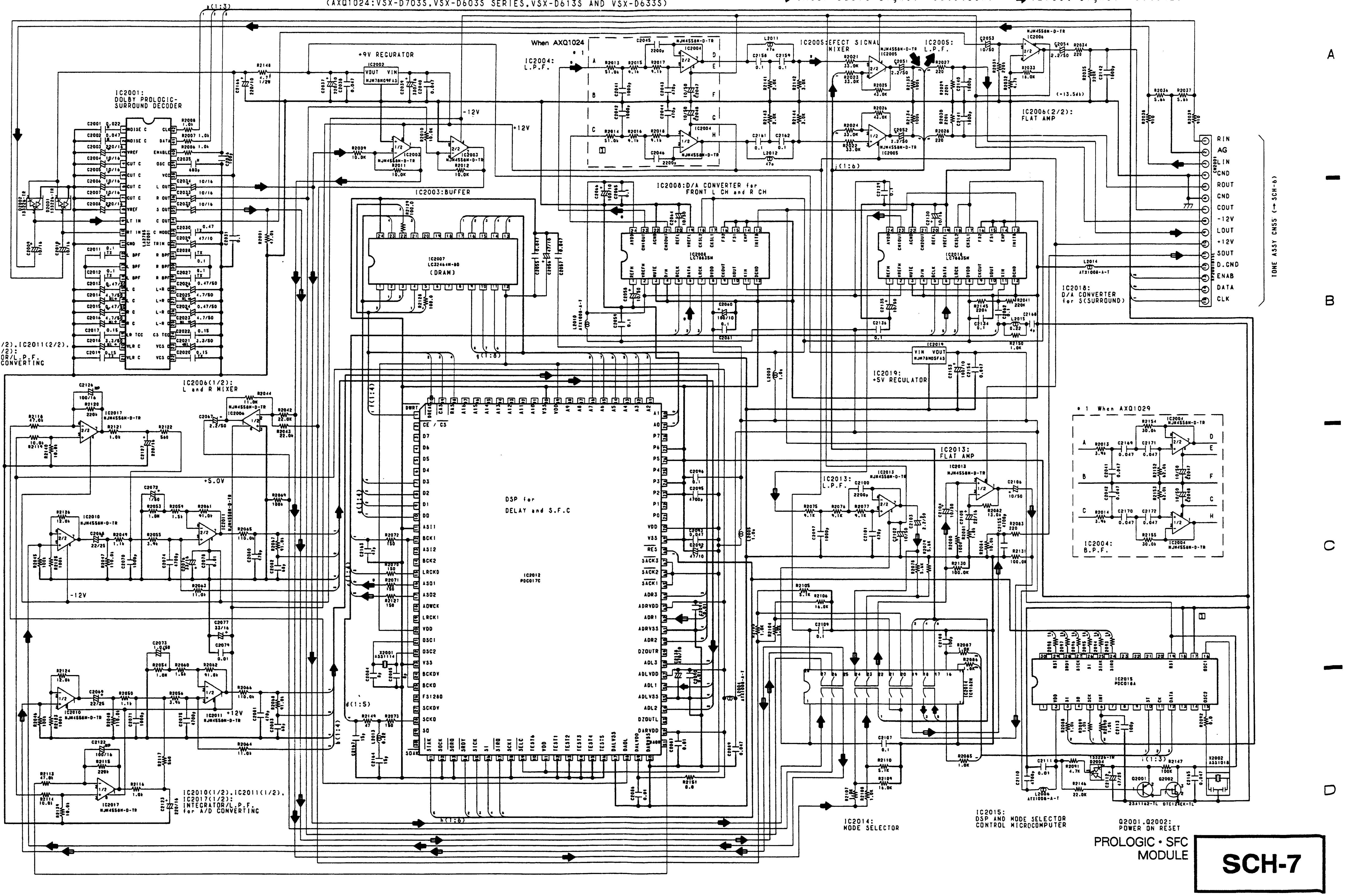
- This diagram is viewed from the pink colored foil side.
- This PCB is double sided.

NOTE : Parts marked * are replaced as follows.
(PCB diagram shows for VSX-D703S, VSX-D603S, VSX-D613S and VSX-D633S.)

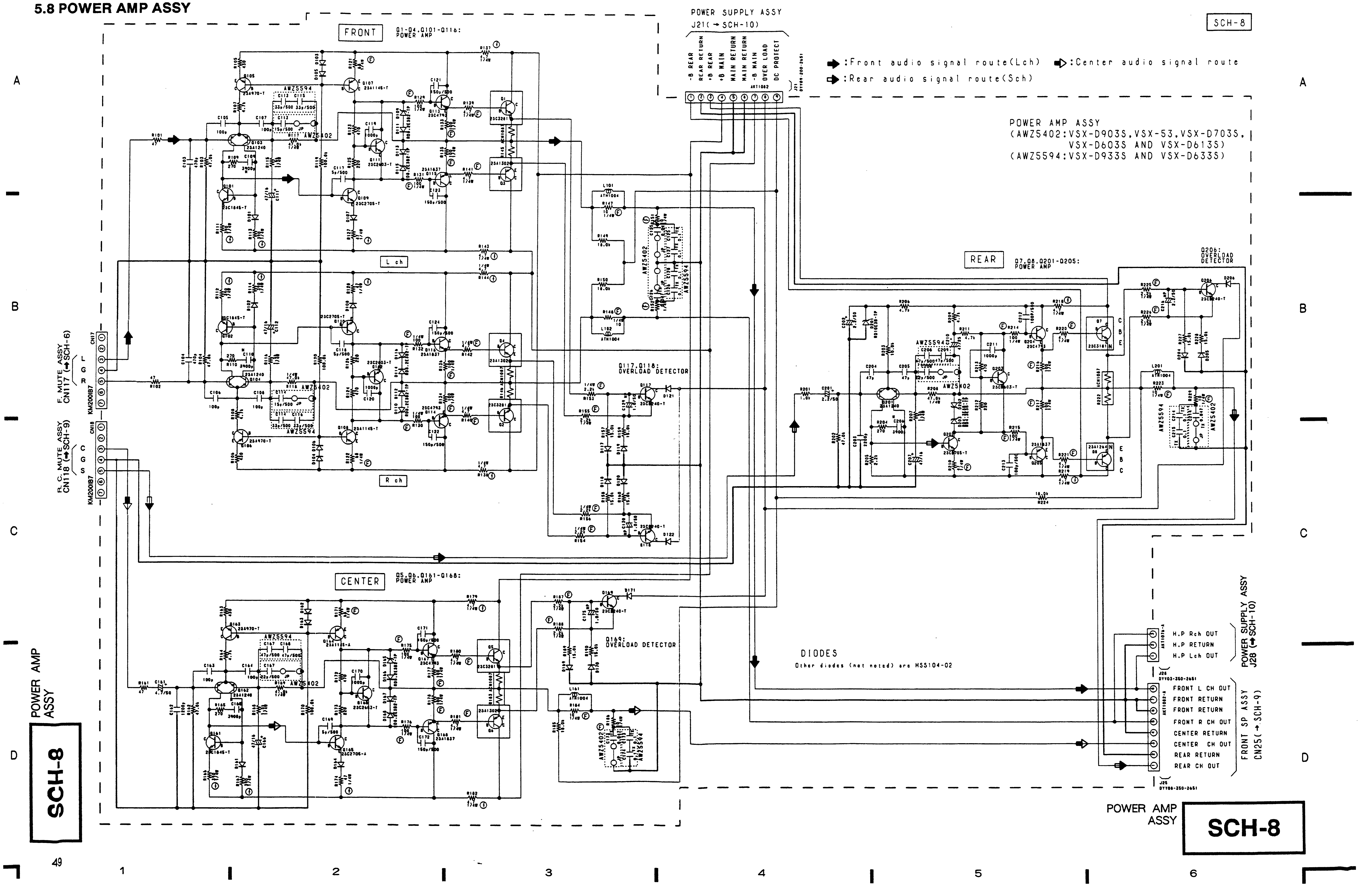
| VSX-D703S, VSX-D603S, VSX-D613S AND VSX-D633S | VSX-D903S, VSX-D933S AND VSX-53 |
|---|---|
| R2015 | C2169 |
| R2016 | C2170 |
| R2017 | C2171 |
| R2018 | C2172 |
| C2043 | R2152 |
| C2044 | R2153 |
| C2045 | R2154 |
| C2046 | R2155 |

➡ :Front audio signal route(Lch)
⇨ :Center audio signal route
⇨ :Rear audio signal route(Sch)
➡ :Efect signal route(Lch)

PROLOGIC-SFC MODULE (AXQ1029:VSX-D903S,VSX-D933S AND VSX-53)
(AXQ1024:VSX-D703S,VSX-D603S SERIES,VSX-D613S AND VSX-D633S)


1
2
3
4
5
6
A
B
C
D
IC2001: DOLBY PROLOGIC-SURROUND DECODER
+9V REGURATOR
IC2002
-12V
+12V
IC2003:BUFFER
IC2007 LC3246AM-80 (DRAM)
When AXQ1024
IC2004: L.P.F.
IC2005:EFECT SIGNAL MIXER
IC2005: L.P.F.
IC2006(2/2): FLAT AMP
IC2008:D/A CONVERTER for FRONT L CH and R CH
IC2018: D/A CONVERTER for S(SURROUND)
IC2019: +5V REGULATOR
TONE ASSY CN55 (→ SCH-6)
RIN
AG
LIN
GND
ROUT
GND
COUT
-12V
LOUT
+12V
SOUT
D.GND
ENAB
DATA
CLK
IC2010(2/2),IC2011(2/2), IC2017(2/2): INTEGRATOR/L.P.F. for A/D CONVERTING
IC2006(1/2): L and R MIXER
+5.0V
-12V
+12V
DSP for DELAY and S.F.C
IC2012 PDC017C
IC2010(1/2),IC2011(1/2), IC2017(1/2): INTEGRATOR/L.P.F. for A/D CONVERTING
* 1 When AXQ1029
IC2004: B.P.F.
IC2013: L.P.F.
IC2013: FLAT AMP
IC2014: MODE SELECTOR
IC2015: DSP AND MODE SELECTOR CONTROL MICROCOMPUTER
IC2015 PDC018A
Q2001,Q2002: POWER ON RESET
X2001
X2002

## 5.8 POWER AMP ASSY


FRONT
Q1-Q4, Q101-Q116: POWER AMP
L ch
R ch
Q117, Q118: OVERLOAD DETECTOR
REAR
Q7, Q8, Q201-Q205: POWER AMP
Q206: OVERLOAD DETECTOR
CENTER
Q5, Q6, Q161-Q168: POWER AMP
Q169: OVERLOAD DETECTOR
POWER SUPPLY ASSY J21(→SCH-10)
-B REAR
REAR RETURN
+B REAR
+B MAIN
MAIN RETURN
MAIN RETURN
-B MAIN
OVER LOAD
DC PROTECT
F. MUTE ASSY CN117 (→SCH-6)
R. C. MUTE ASSY CN118 (→SCH-9)
POWER SUPPLY ASSY J28 (→SCH-10)
H.P Rch OUT
H.P RETURN
H.P Lch OUT
FRONT SP ASSY CN25(→SCH-9)
FRONT L CH OUT
FRONT RETURN
FRONT RETURN
FRONT R CH OUT
CENTER RETURN
CENTER CH OUT
REAR RETURN
REAR CH OUT
AWZ5402
AWZ5594
1
2
3
4
5
6
A
B
C
D
SCH-8
POWER AMP ASSY

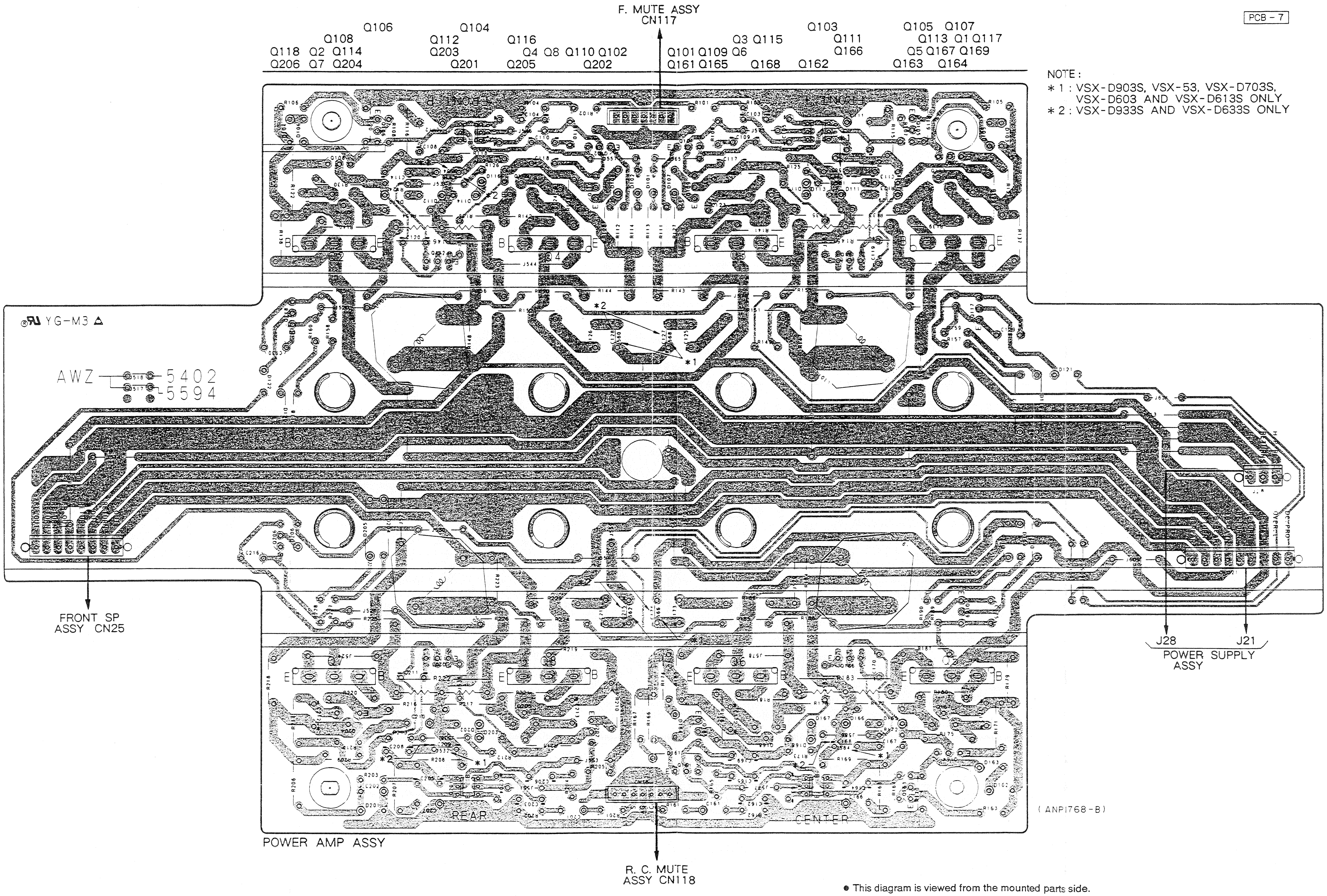
➡:Front audio signal route(Lch) ⇨:Center audio signal route

⇨:Rear audio signal route(Sch)

POWER AMP ASSY
(AWZ5402:VSX-D903S, VSX-53, VSX-D703S, VSX-D603S AND VSX-D613S)
(AWZ5594:VSX-D933S AND VSX-D633S)

DIODES
Other diodes (not noted) are HSS104-02

PCB – 7

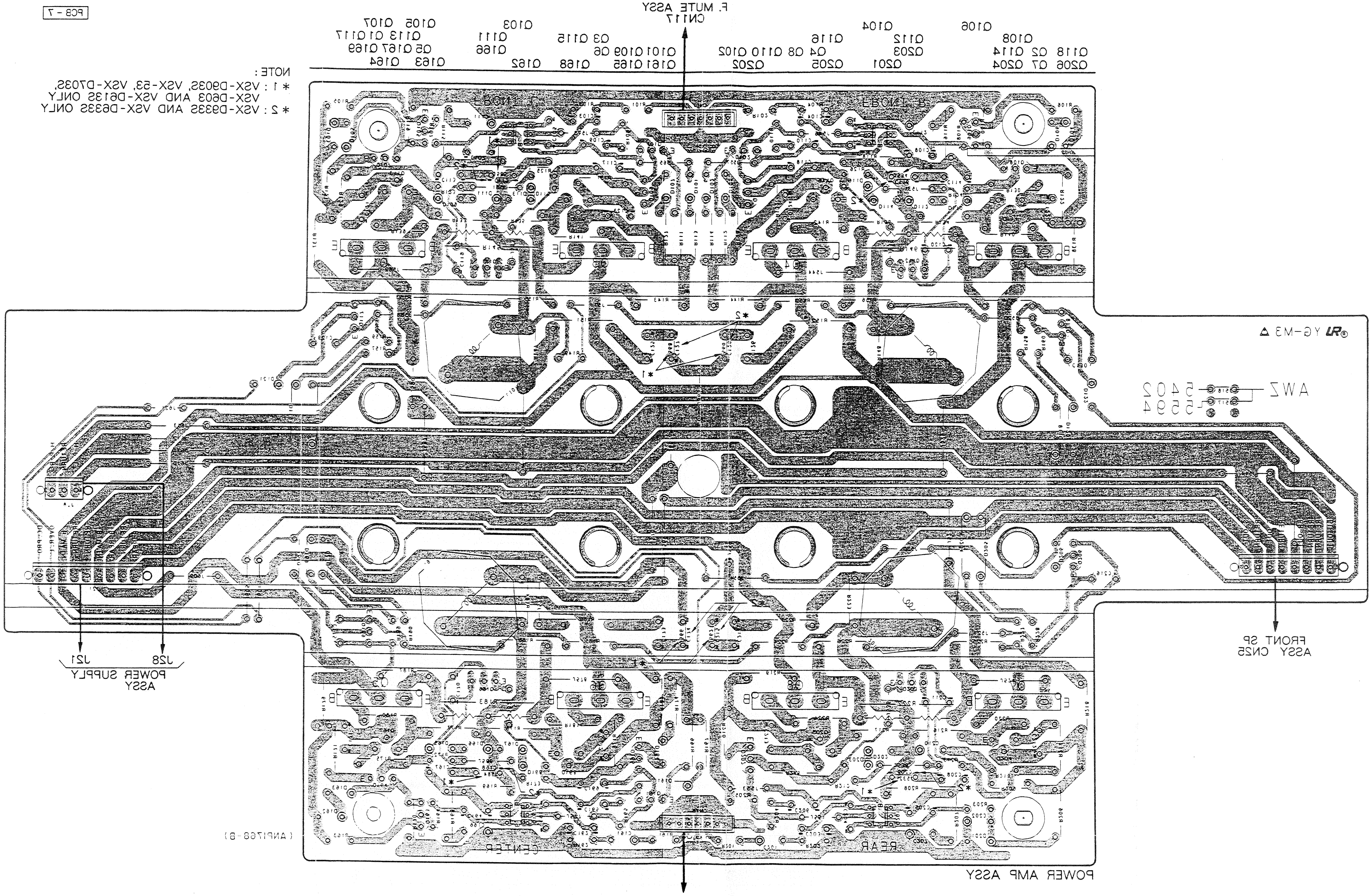

F. MUTE ASSY
CN117
Q106
Q108
Q118 Q2 Q114
Q206 Q7 Q204
Q104
Q112
Q203
Q201
Q116
Q4 Q8 Q110 Q102
Q205
Q202
Q101 Q109 Q6
Q161 Q165
Q3 Q115
Q168
Q103
Q111
Q166
Q162
Q105 Q107
Q113 Q1 Q117
Q5 Q167 Q169
Q163 Q164
YG-M3
AWZ
5402
5594
FRONT
REAR
CENTER
*1
*2
FRONT SP
ASSY CN25
J28
J21
POWER SUPPLY
ASSY
(ANP1768-B)
POWER AMP ASSY
R. C. MUTE
ASSY CN118

NOTE:
∗ 1 : VSX-D903S, VSX-53, VSX-D703S,
VSX-D603 AND VSX-D613S ONLY
∗ 2 : VSX-D933S AND VSX-D633S ONLY

- This diagram is viewed from the mounted parts side.

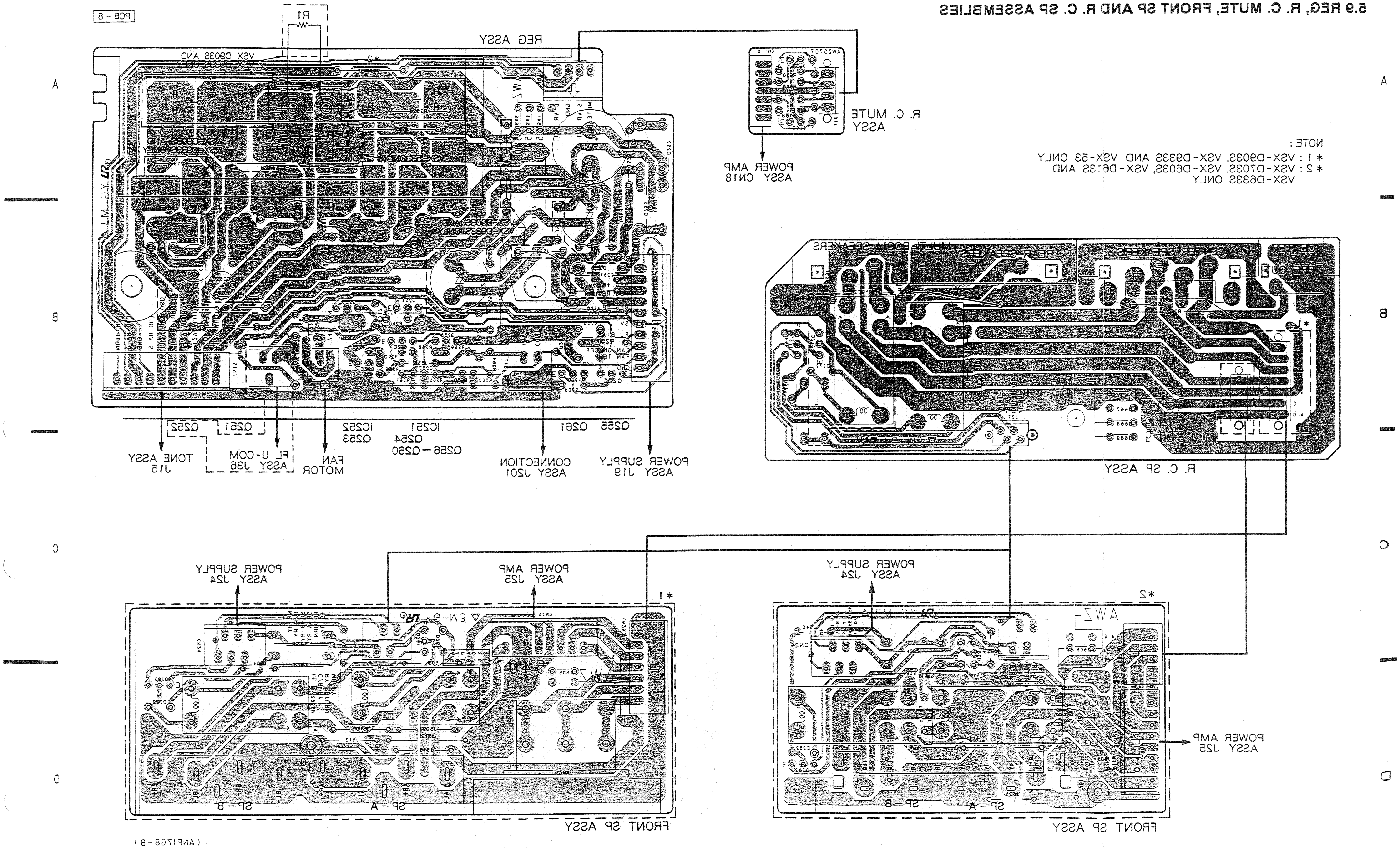
PCB-7

NOTE:
* 1 : VSX-D903S, VSX-53, VSX-D703S,
VSX-D603 AND VSX-D613S ONLY
* 2 : VSX-D933S AND VSX-D633S ONLY


F. MUTE ASSY
CN117
Q105 Q107
Q113 Q117
Q5 Q167 Q169
Q163 Q164
Q103
Q111
Q166
Q162
Q3 Q115
Q6
Q101 Q109
Q161 Q165
Q168
Q116
Q4 Q8 Q110 Q102
Q202
Q205
Q104
Q112
Q203
Q201
Q106
Q108
Q118 Q2 Q114
Q206 Q7 Q204
FRONT L
FRONT R
*1
*2
YG-M3
AWZ
5402
5594
J21
J28
POWER SUPPLY
ASSY
FRONT SP
ASSY CN25
CENTER
REAR
(ANP1768-B)
POWER AMP ASSY
R. C. MUTE
ASSY CN118
A
B
C
D
1
2
3
4
5
6

● This diagram is viewed from the foil side.

## 5.9 REG, R. C. MUTE, FRONT SP AND R. C. SP ASSEMBLIES

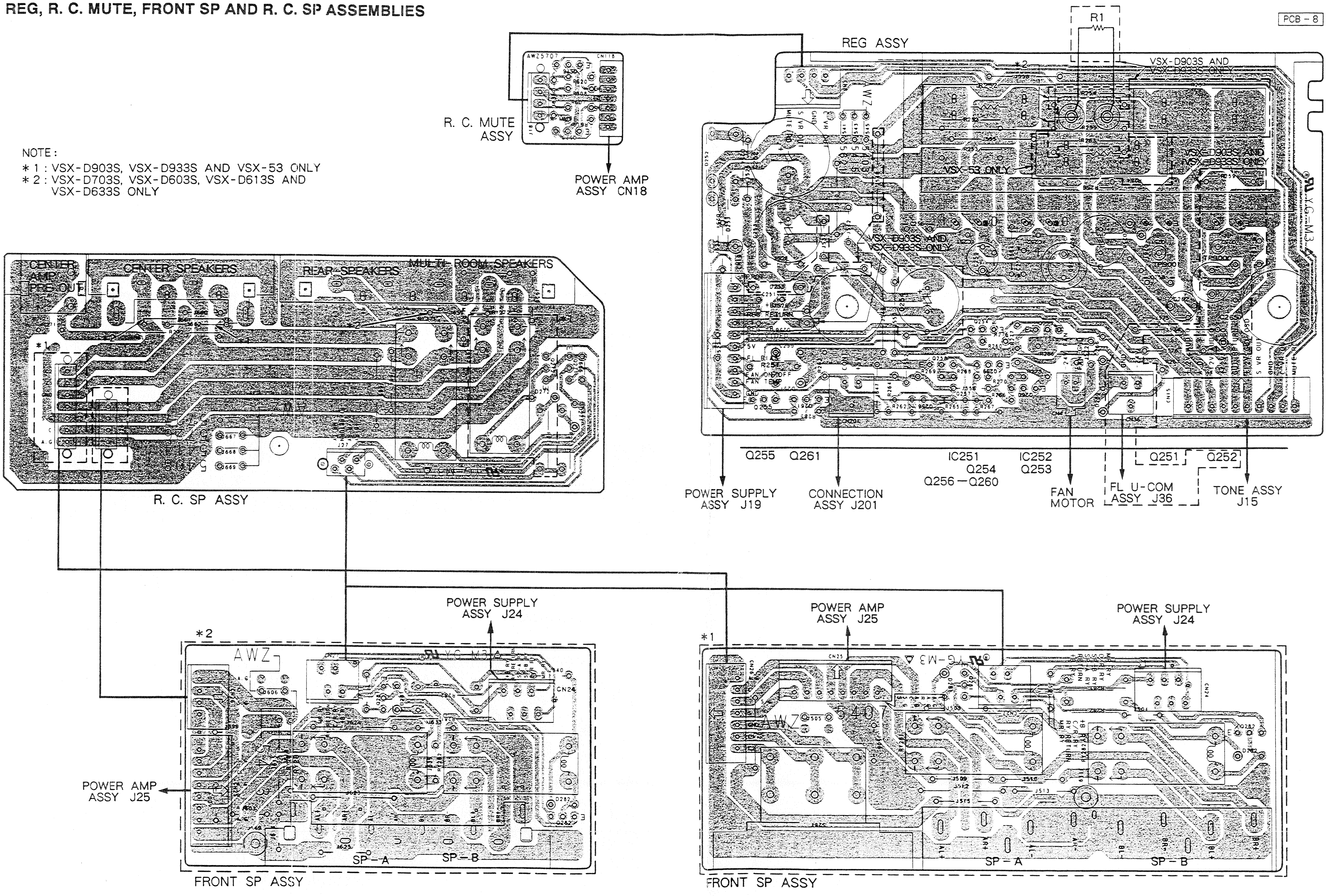

PCB - 8
R1
REG ASSY
VSX-D903S AND VSX-D933S ONLY
*2
VSX-53 ONLY
R. C. MUTE ASSY
POWER AMP ASSY CN18
Q252
Q251
IC252
IC251
Q253
Q254
Q256—Q260
Q265
Q261
TONE ASSY J15
FL U-COM ASSY J36
FAN MOTOR
CONNECTION ASSY J201
POWER SUPPLY ASSY J19
MULTI-ROOM SPEAKERS
REAR SPEAKERS
CENTER SPEAKERS
R. C. SP ASSY
POWER SUPPLY ASSY J24
POWER AMP ASSY J25
*1
*2
SP-B
SP-A
FRONT SP ASSY
FRONT SP ASSY
POWER AMP ASSY J25
(ANP1768-B)

NOTE :
* 1 : VSX-D903S, VSX-D933S AND VSX-53 ONLY
* 2 : VSX-D703S, VSX-D603S, VSX-D613S AND
VSX-D633S ONLY

● This diagram is viewed from the foil side.

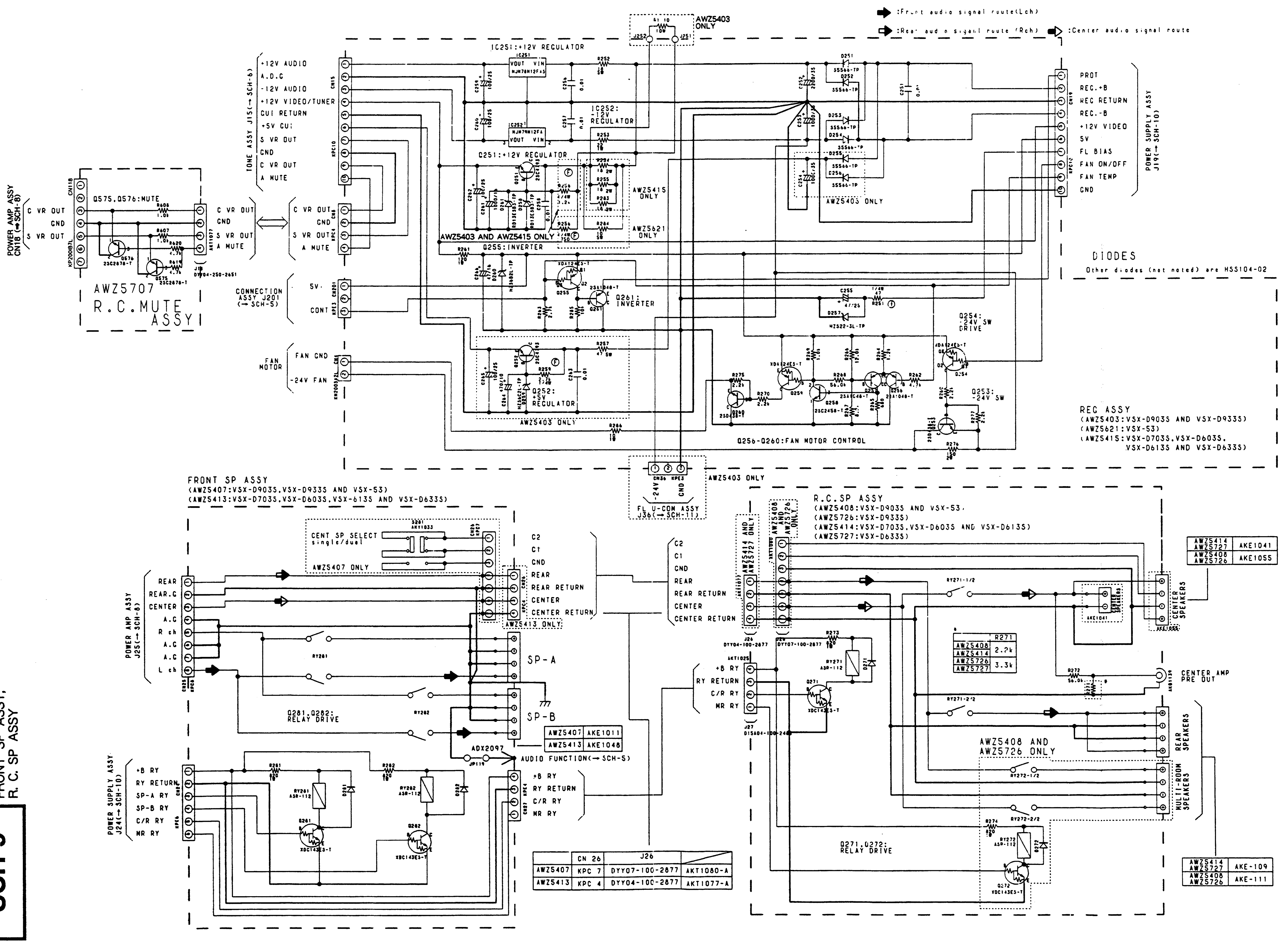
## 5.9 REG, R. C. MUTE, FRONT SP AND R. C. SP ASSEMBLIES

NOTE :
∗ 1 : VSX-D903S, VSX-D933S AND VSX-53 ONLY
∗ 2 : VSX-D703S, VSX-D603S, VSX-D613S AND
VSX-D633S ONLY


PCB – 8
R. C. MUTE ASSY
POWER AMP ASSY CN18
REG ASSY
R1
VSX-D903S AND VSX-D933S ONLY
VSX-53 ONLY
VSX-D903S AND VSX-D933S ONLY
VSX-D903S AND VSX-D933S ONLY
∗2
Q255 Q261
IC251 Q254 Q256—Q260
IC252 Q253
Q251 Q252
POWER SUPPLY ASSY J19
CONNECTION ASSY J201
FAN MOTOR
FL U-COM ASSY J36
TONE ASSY J15
CENTER AMP PRE OUT
CENTER SPEAKERS
REAR SPEAKERS
MULTI-ROOM SPEAKERS
∗1
R. C. SP ASSY
POWER SUPPLY ASSY J24
∗2
AWZ
CN24
POWER AMP ASSY J25
SP–A
SP–B
FRONT SP ASSY
POWER AMP ASSY J25
POWER SUPPLY ASSY J24
∗1
CN25
CN24
SP–A
SP–B
FRONT SP ASSY

( ANP1768 – B )

• This diagram is viewed from the mounted parts side.


:Front audio signal route(Lch)
:Rear audio signal route (Rch)
:Center audio signal route
AWZ5403 ONLY
IC251:+12V REGULATOR
IC252: -12V REGULATOR
Q251:+12V REGULATOR
Q252: +5V REGULATOR
Q255:INVERTER
Q261: INVERTER
Q254: -24V SW DRIVE
Q253: -24V SW
Q256-Q260:FAN MOTOR CONTROL
AWZ5415 ONLY
AWZ5621 ONLY
AWZ5403 AND AWZ5415 ONLY
TONE ASSY J15(→ SCH-6)
+12V AUDIO
A.D.G
-12V AUDIO
+12V VIDEO/TUNER
CUI RETURN
+5V CUI
S VR OUT
GND
C VR OUT
A MUTE
CONNECTION ASSY J201 (→ SCH-5)
5V
CONT
FAN MOTOR
FAN GND
-24V FAN
POWER SUPPLY ASSY J19(→ SCH-10)
PROT
REC.+B
REC RETURN
REC.-B
+12V VIDEO
5V
FL BIAS
FAN ON/OFF
FAN TEMP
GND
DIODES
Other diodes (not noted) are HSS104-02
REG ASSY
(AWZ5403:VSX-D903S AND VSX-D933S)
(AWZ5621:VSX-53)
(AWZ5415:VSX-D703S,VSX-D603S, VSX-D613S AND VSX-D633S)
POWER AMP ASSY CN18 (→ SCH-8)
Q575,Q576:MUTE
AWZ5707 R.C.MUTE ASSY
FL U-COM ASSY J36(→ SCH-11)
-24V
GND
FRONT SP ASSY
(AWZ5407:VSX-D903S,VSX-D933S AND VSX-53)
(AWZ5413:VSX-D703S,VSX-D603S,VSX-613S AND VSX-D633S)
CENT SP SELECT single/dual
AWZ5407 ONLY
AWZ5413 ONLY
POWER AMP ASSY J25(→ SCH-8)
REAR
REAR.G
CENTER
A.G
R ch
L ch
C2
C1
GND
REAR RETURN
CENTER RETURN
SP-A
SP-B
Q281,Q282: RELAY DRIVE
AWZ5407 AKE1011
AWZ5413 AKE1048
ADX2097
AUDIO FUNCTION(→ SCH-5)
POWER SUPPLY ASSY J24(→ SCH-10)
+B RY
RY RETURN
SP-A RY
SP-B RY
C/R RY
MR RY
R.C.SP ASSY
(AWZ5408:VSX-D903S AND VSX-53)
(AWZ5726:VSX-D933S)
(AWZ5414:VSX-D703S,VSX-D603S AND VSX-D613S)
(AWZ5727:VSX-D633S)
AWZ5414 AND AWZ5727 ONLY
AWZ5408 AND AWZ5726 ONLY
AWZ5414 AWZ5727 AKE1041
AWZ5408 AWZ5726 AKE1055
CENTER SPEAKERS
CENTER AMP PRE OUT
REAR SPEAKERS
MULTI-ROOM SPEAKERS
AWZ5408 AND AWZ5726 ONLY
Q271,Q272: RELAY DRIVE
AWZ5414 AWZ5727 AKE-109
AWZ5408 AWZ5726 AKE-111
R271
AWZ5408 AWZ5414 2.2k
AWZ5726 AWZ5727 3.3k

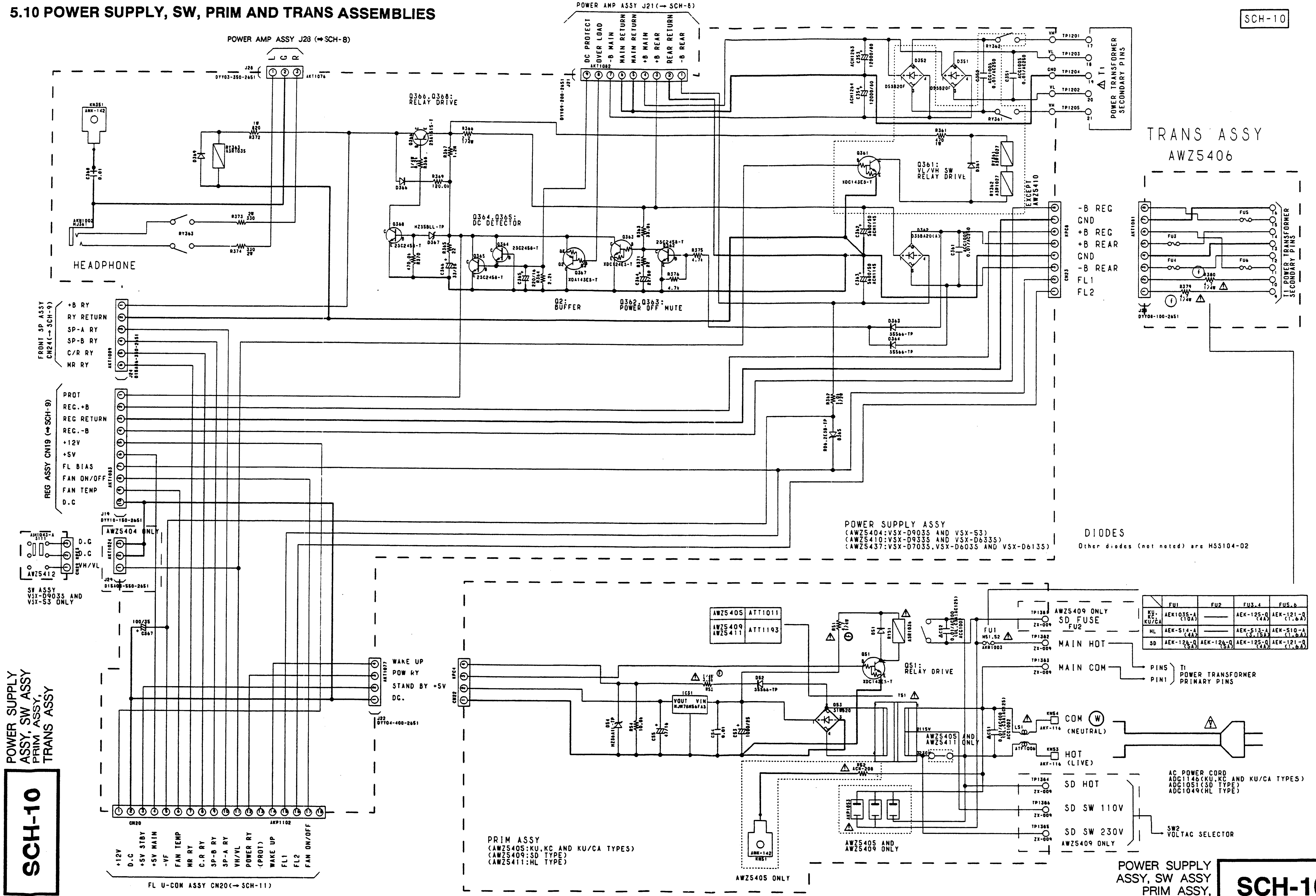
|  | CN 26 | J26 |  |
|---|---|---|---|
| AWZ5407 | KPC 7 | DYY07-100-2877 | AKT1080-A |
| AWZ5413 | KPC 4 | DYY04-100-2877 | AKT1077-A |

REG ASSY,
R. C. MUTE ASSY,
FRONT SP ASSY,
R. C. SP ASSY

SCH-9

## 5.10 POWER SUPPLY, SW, PRIM AND TRANS ASSEMBLIES

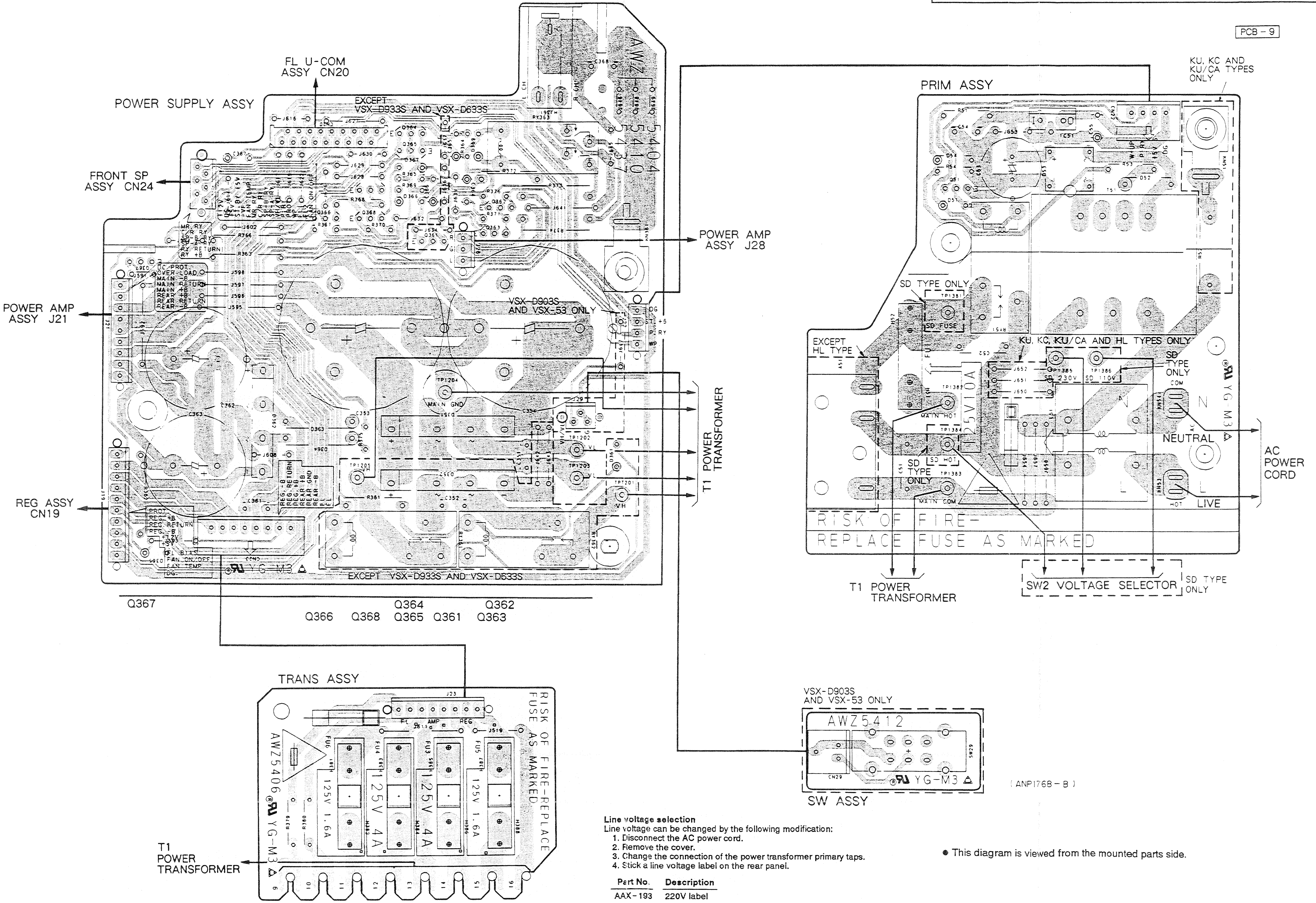
SCH-10


POWER AMP ASSY J28 (→SCH-8)
L G R
J28
DYY03-350-2651
AKT1076
POWER AMP ASSY J21(→ SCH-8)
DC PROTECT
OVER LOAD
-B MAIN
MAIN RETURN
MAIN RETURN
+B MAIN
+B REAR
REAR RETURN
-B REAR
AKT1082
KN351
AMK-142
Q366,Q368:
RELAY DRIVE
RY362
ASR1035
D369
C368
R372
R373
R374
RY363
AKN1002
HEADPHONE
D366
Q366
Q368
HZS5BLL-TP
D367
R369
R370
Q364,Q365:
DC DETECTOR
Q365
2SC2458-T
Q364
Q2:
BUFFER
Q367
XDA143ES-T
Q362,Q363:
POWER OFF MUTE
R375
R376
Q361
XDC143E5-T
Q361:
VL/VH SW
RELAY DRIVE
D361
R361
RY362
ASR1027
D352
D351
D5SB20F
ACH1263
ACH1264
C353
C354
ACG1005
RY361
D361
TP1201
TP1203
TP1204
TP1202
TP1205
VH
VL
GND
VL
VH
17
18
19
20
21
T1
POWER TRANSFORMER
SECONDARY PINS
EXCEPT
AWZ5410
-B REG
GND
+B REG
+B REAR
GND
-B REAR
FL1
FL2
CN23
D363
D364
1SS66-TP
C361
C362
R362
D365
TRANS ASSY
AWZ5406
FU5
FU3
FU4
FU6
R380
R379
T1 POWER TRANSFORMER
SECONDARY PINS
AKT1081
J23
DYY08-100-2651
FRONT SP ASSY
CN24(→ SCH-9)
+B RY
RY RETURN
SP-A RY
SP-B RY
C/R RY
MR RY
J24
AKT1009
REG ASSY CN19 (→SCH-9)
PROT
REG.+B
REG RETURN
REG.-B
+12V
+5V
FL BIAS
FAN ON/OFF
FAN TEMP
D.G
AKT1083
J19
DYY10-150-2651
AWZ5404 ONLY
ASH1043-A
S1111
D.G
D.G
VH/VL
AWZ5412
J29
DISS03-550-2651
SW ASSY
VSX-D903S AND
VSX-53 ONLY
POWER SUPPLY ASSY
(AWZ5404:VSX-D903S AND VSX-53)
(AWZ5410:VSX-D933S AND VSX-D633S)
(AWZ5437:VSX-D703S,VSX-D603S AND VSX-D613S)
DIODES
Other diodes (not noted) are HSS104-02
100/35
C367
WAKE UP
POW RY
STAND BY +5V
DC.
AKT1077
J22
DYY04-400-2651
CN20
AKP1102
+12V
D.G
+5V STBY
+5V MAIN
-VF
FAN TEMP
MR RY
C.R RY
SP-B RY
SP-A RY
VH/VL
POWER RY
(PROT)
WAKE UP
FL1
FL2
FAN ON/OFF
FL U-COM ASSY CN20(→ SCH-11)
CN22
AWZ5405 ATT1011
AWZ5409
AWZ5411 ATT1193
R51
D51
RY51
ASR1036
Q51
XDC143ES-T
Q51:
RELAY DRIVE
R52
D52
1SS66-TP
IC51
VOUT VIN
NJM78M56FA3
D54
HZS6A1L
R54
C55
C51
C53
D53
S1WB20
TS1
115V
AWZ5405 AND
AWZ5411 ONLY
C52
ACG1005
FU1
HS1.52
AKR1003
TP1381
ZX-009
AWZ5409 ONLY
SD FUSE
FU2
TP1382
MAIN HOT
TP1383
MAIN COM
PINS5
PIN1
T1
POWER TRANSFORMER
PRIMARY PINS
KN54
COM
(NEUTRAL)
KN53
HOT
(LIVE)
AKF-116
LS1
ATF1006
AC POWER CORD
ADG1146(KU,KC AND KU/CA TYPES)
ADG1051(SD TYPE)
ADG1049(HL TYPE)
TP1384
SD HOT
TP1386
SD SW 110V
TP1385
SD SW 230V
AWZ5409 ONLY
SW2
VOLTAG SELECTOR
RS2
ACN-208
AWZ5405 AND
AWZ5409 ONLY
AMK-142
KN51
AWZ5405 ONLY
PRIM ASSY
(AWZ5405:KU,KC AND KU/CA TYPES)
(AWZ5409:SD TYPE)
(AWZ5411:HL TYPE)

|  | FU1 | FU2 | FU3,4 | FU5,6 |
|---|---|---|---|---|
| KU,<br>KC,<br>KU/CA | AEK1035-A<br>(10A) | — | AEK-125-Q<br>(4A) | AEK-121-Q<br>(1.6A) |
| HL | AEK-514-A<br>(4A) | — | AEK-513-A<br>(3.15A) | AEK-510-A<br>(1.6A) |
| SD | AEK-126-Q<br>(5A) | AEK-126-Q<br>(5A) | AEK-125-Q<br>(4A) | AEK-121-Q<br>(1.6A) |

POWER SUPPLY
ASSY, SW ASSY
PRIM ASSY,
TRANS ASSY

**SCH-10**


POWER SUPPLY ASSY
FL U-COM ASSY CN20
EXCEPT VSX-D933S AND VSX-D633S
FRONT SP ASSY CN24
POWER AMP ASSY J28
POWER AMP ASSY J21
VSX-D903S AND VSX-53 ONLY
T1 POWER TRANSFORMER
REG ASSY CN19
EXCEPT VSX-D933S AND VSX-D633S
Q367
Q366
Q368
Q364
Q365
Q361
Q362
Q363
TRANS ASSY
AWZ5406
RISK OF FIRE-REPLACE FUSE AS MARKED.
125V 1.6A
125V 4A
125V 4A
125V 1.6A
T1 POWER TRANSFORMER
PRIM ASSY
KU, KC AND KU/CA TYPES ONLY
SD TYPE ONLY
SD FUSE
EXCEPT HL TYPE
KU, KC, KU/CA AND HL TYPES ONLY
SD TYPE ONLY
SD 230V
SD 110V
MAIN HOT
SD HOT
SD TYPE ONLY
MAIN COM
NEUTRAL
LIVE
AC POWER CORD
RISK OF FIRE-
REPLACE FUSE AS MARKED
T1 POWER TRANSFORMER
SW2 VOLTAGE SELECTOR
SD TYPE ONLY
VSX-D903S AND VSX-53 ONLY
AWZ5412
SW ASSY
( ANP1768 – B )

**Line voltage selection**

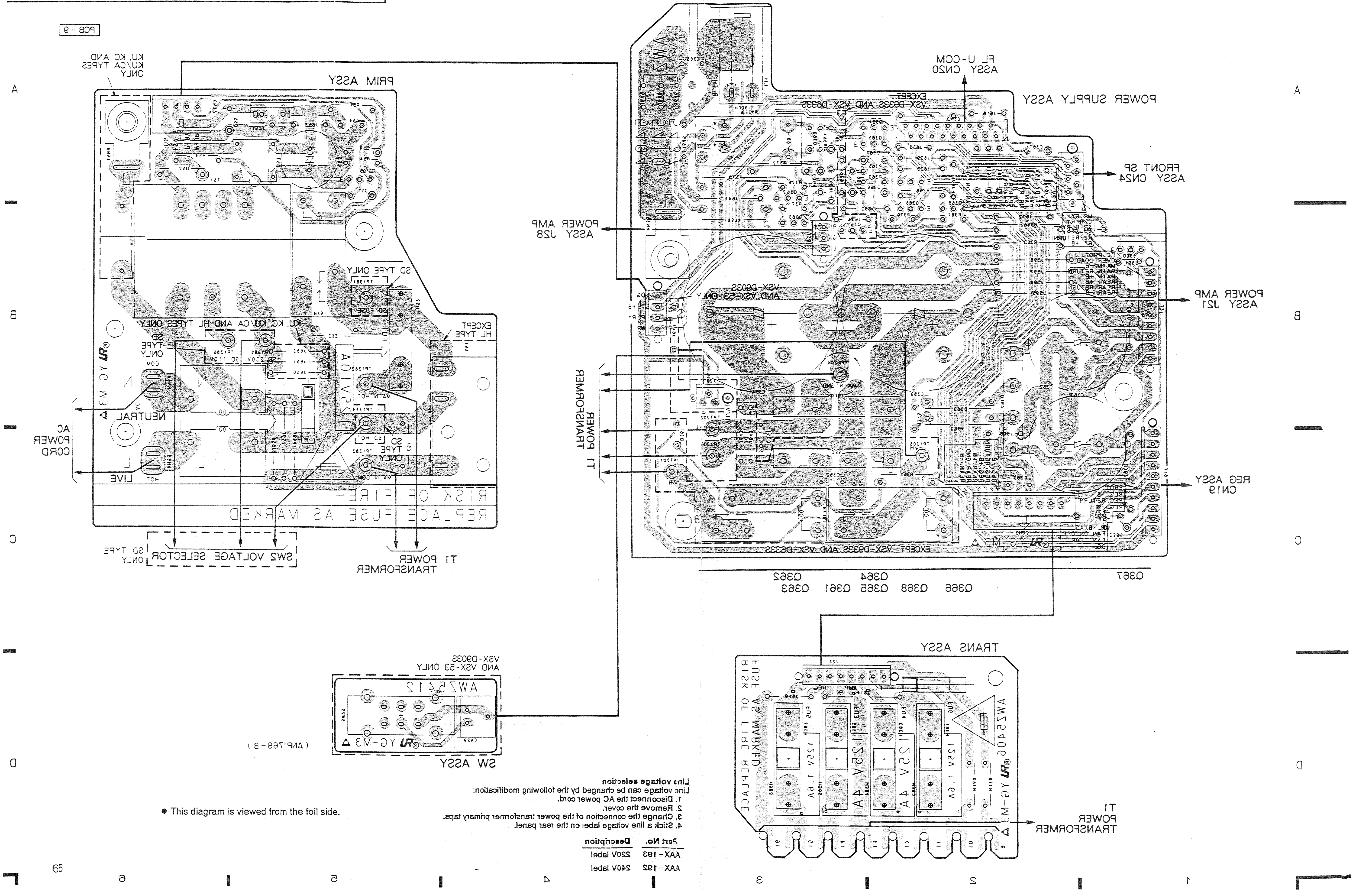
Line voltage can be changed by the following modification:

1. Disconnect the AC power cord.
2. Remove the cover.
3. Change the connection of the power transformer primary taps.
4. Stick a line voltage label on the rear panel.

| Part No. | Description |
|---|---|
| AAX-193 | 220V label |
| AAX-192 | 240V label |

- This diagram is viewed from the mounted parts side.

# VSX-D903S, VSX-D933S, VSX-53, VSX-D703S, VSX-D613S, VSX-D603S, VSX-D633S


PCB - 9
PRIM ASSY
KU, KC AND KU/CA TYPES ONLY
SD TYPE ONLY
KU, KC, KU/CA AND HL TYPES ONLY
EXCEPT HL TYPE
SD TYPE ONLY
NEUTRAL
LIVE
AC POWER CORD
RISK OF FIRE - REPLACE FUSE AS MARKED
SW2 VOLTAGE SELECTOR
SD TYPE ONLY
T1 POWER TRANSFORMER
POWER AMP ASSY J28
T1 POWER TRANSFORMER
FL U-COM ASSY CN20
POWER SUPPLY ASSY
EXCEPT VSX-D933S AND VSX-D633S
FRONT SP ASSY CN24
VSX-D903S AND VSX-53 ONLY
POWER AMP ASSY J21
REG ASSY CN19
EXCEPT VSX-D933S AND VSX-D633S
Q367
Q362 Q363
Q364 Q361
Q365
Q368
Q366
VSX-D903S AND VSX-53 ONLY
AWZ5412
SW ASSY
CN29
( ANP1768-B )
TRANS ASSY
AWZ5406
RISK OF FIRE - REPLACE FUSE AS MARKED
125V 1.6A
125V 4A
125V 4A
125V 1.6A
T1 POWER TRANSFORMER
A
B
C
D
1
2
3
4
5
6

- This diagram is viewed from the foil side.

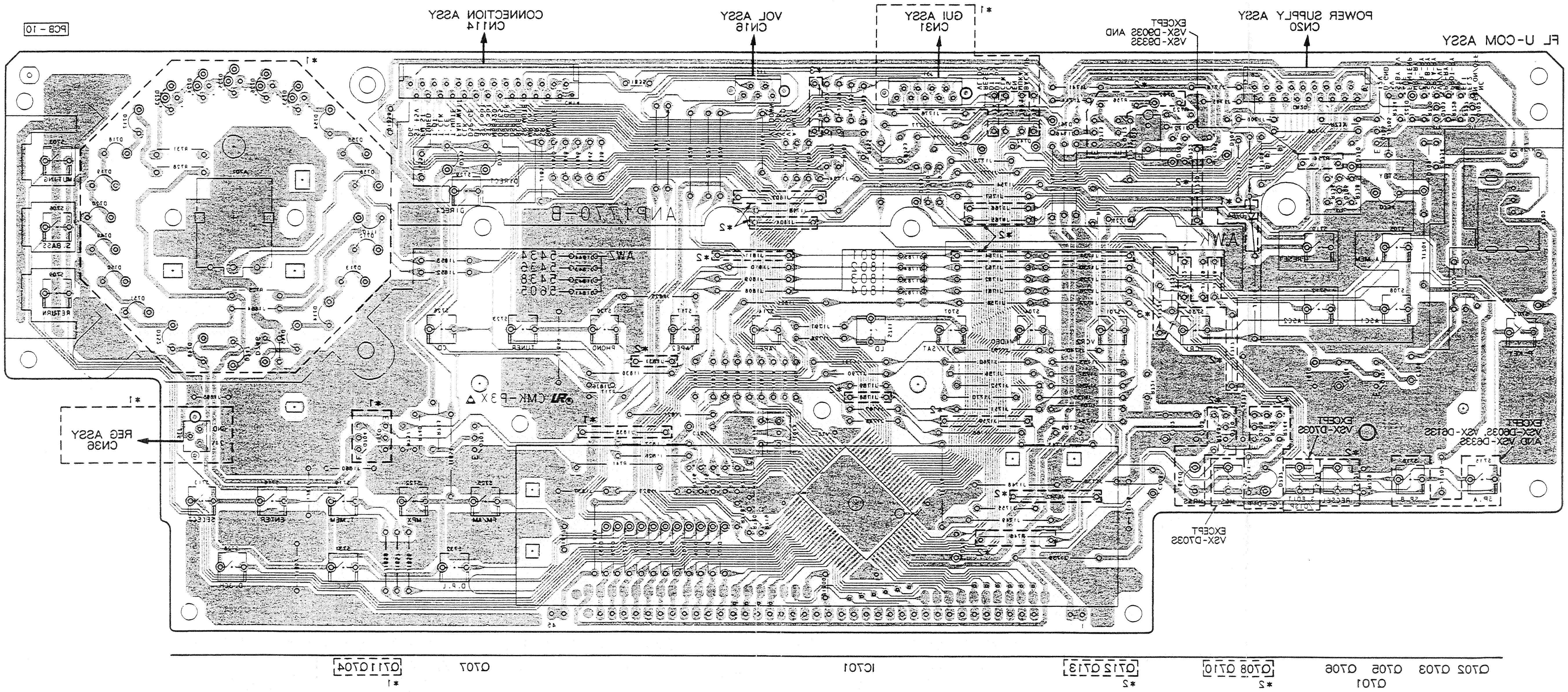
**Line voltage selection**

Line voltage can be changed by the following modification:

1. Disconnect the AC power cord.
2. Remove the cover.
3. Change the connection of the power transformer primary taps.
4. Stick a line voltage label on the rear panel.

| Part No. | Description |
|---|---|
| AAX-193 | 220V label |
| AAX-192 | 240V label |

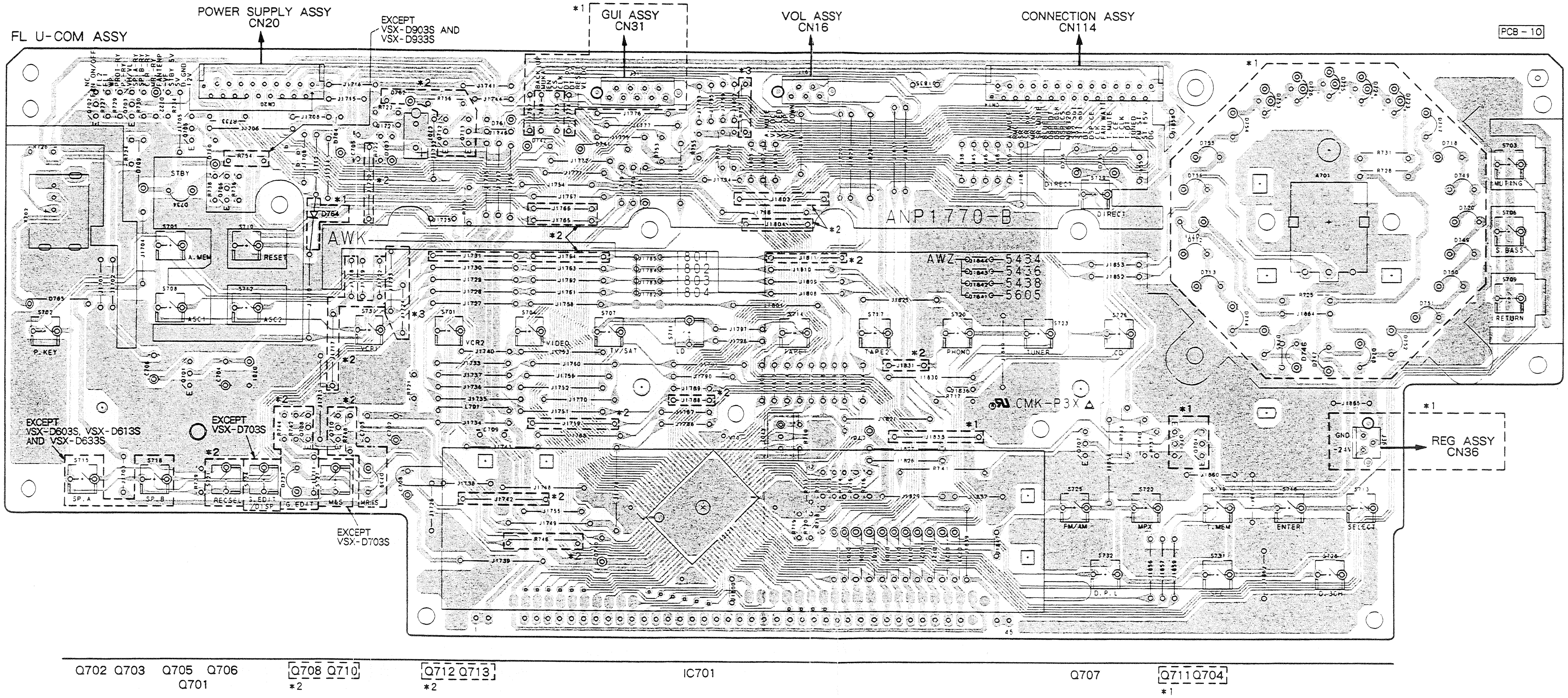
## 5.11 FL U-COM ASSY


PCB-10
CONNECTION ASSY
CN114
VOL ASSY
CN16
GUI ASSY
CN31
*1
EXCEPT
VSX-D903S AND
VSX-D933S
POWER SUPPLY ASSY
CN20
FL U-COM ASSY
REG ASSY
CN36
*1
*2
*3
ANP1770-B
AWZ
CMK-P3X
DIRECT
TUNER
PHONO
TAPE
LD
CD
VCR
TV/SAT
VIDEO
MUTING
S.BASS
RETURN
ENTER
T.MEM
MPX
FM/AM
D.P.L
EXCEPT
VSX-D703S
EXCEPT
VSX-D603S, VSX-D613S
AND VSX-D633S
EXCEPT
VSX-D703S
Q702 Q703 Q705 Q706
Q701
Q708 Q710
*2
Q712 Q713
*2
IC701
Q707
Q711 Q704
*1

NOTE ;
* 1 : VSX-D903S AND VSX-D933S ONLY
* 2 : VSX-D903S, VSX-D933S AND VSX-53 ONLY
* 3 : VSX-D603S, VSX-D613S AND VSX-D633S ONLY

- This diagram is viewed from the foil side.

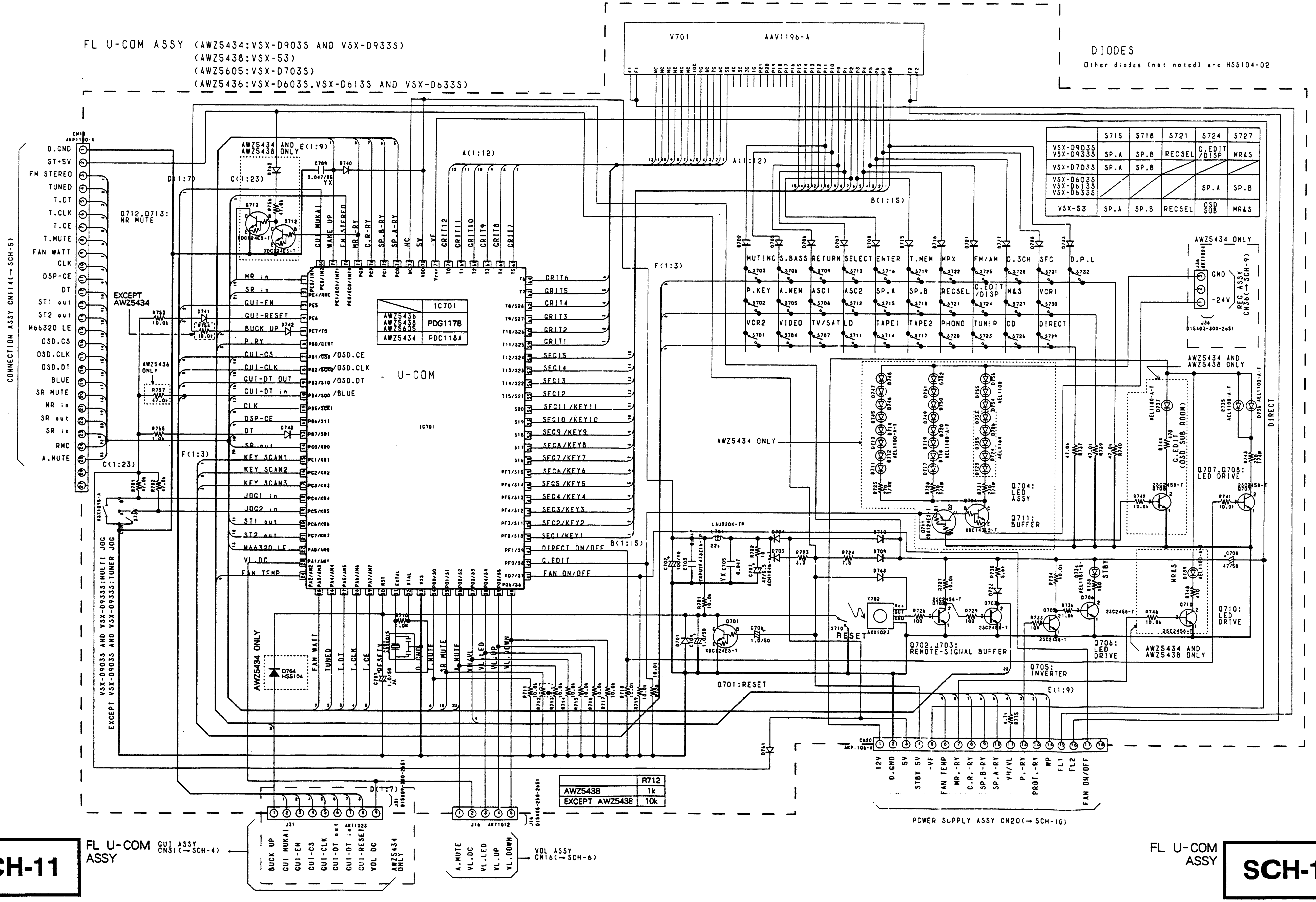
## 5.11 FL U-COM ASSY


FL U-COM ASSY
POWER SUPPLY ASSY
CN20
EXCEPT
VSX-D903S AND
VSX-D933S
*1
GUI ASSY
CN31
VOL ASSY
CN16
CONNECTION ASSY
CN114
PCB-10
STBY
A.MEM
RESET
ASC1
ASC2
P.KEY
AWK
ANP1770-B
DIRECT
AWZ
5434
5436
5438
5605
VCR2
VIDEO
TV/SAT
LD
TAPE
TAPE2
PHONO
TUNER
CD
MUTING
S.BASS
RETURN
CMK-P3X
*1
REG ASSY
CN36
GND
-24V
EXCEPT
VSX-D603S, VSX-D613S
AND VSX-D633S
EXCEPT
VSX-D703S
*2
*3
SP.A
SP.B
REC SEL
S.EDIT
DIGITAL/EDIT
M&S
EXCEPT
VSX-D703S
FM/AM
MPX
T.MEM
ENTER
SELECT
D.P.L
Q702 Q703 Q705 Q706
Q701
Q708 Q710
*2
Q712 Q713
*2
IC701
Q707
Q711 Q704
*1

NOTE ;
* 1 : VSX-D903S AND VSX-D933S ONLY
* 2 : VSX-D903S, VSX-D933S AND VSX-53 ONLY
* 3 : VSX-D603S, VSX-D613S AND VSX-D633S ONLY

- This diagram is viewed from the mounted parts side.

SCH-11


FL U-COM ASSY (AWZ5434:VSX-D903S AND VSX-D933S)
(AWZ5438:VSX-53)
(AWZ5605:VSX-D703S)
(AWZ5436:VSX-D603S,VSX-D613S AND VSX-D633S)
V701 AAV1196-A
DIODES
Other diodes (not noted) are HSS104-02
CN114 AKP1100-A
D.GND
ST+5V
FM STEREO
TUNED
T.DT
T.CLK
T.CE
T.MUTE
FAN WATT
CLK
DSP-CE
DT
ST1 out
ST2 out
M66320 LE
OSD.CS
OSD.CLK
OSD.DT
BLUE
SR MUTE
MR in
SR out
SR in
RMC
A.MUTE
CONNECTION ASSY CN114(→ SCH-5)
Q712,Q713: MR MUTE
EXCEPT AWZ5434
AWZ5436 ONLY
AWZ5434 AND AWZ5438 ONLY
IC701 U-COM
AWZ5436 AWZ5438 AWZ5605 PDG117B
AWZ5434 PDG118A
MR in
SR in
GUI-EN
GUI-RESET
BUCK UP
P.RY
GUI-CS /OSD.CE
GUI-CLK /OSD.CLK
GUI-DT out /OSD.DT
GUI-DT in /BLUE
CLK
DSP-CE
DT
SR out
KEY SCAN1
KEY SCAN2
KEY SCAN3
JOG1 in
JOG2 in
ST1 out
ST2 out
M66320 LE
VL.DC
FAN TEMP
GUI MUKAI
WAKE UP
FM STEREO
MR.-RY
C.R.-RY
SP.B-RY
SP.A-RY
5V
-VF
GRIT12
GRIT11
GRIT10
GRIT9
GRIT8
GRIT7
GRIT6
GRIT5
GRIT4
GRIT3
GRIT2
GRIT1
SEG15
SEG14
SEG13
SEG12
SEG11/KEY11
SEG10/KEY10
SEG9/KEY9
SEG8/KEY8
SEG7/KEY7
SEG6/KEY6
SEG5/KEY5
SEG4/KEY4
SEG3/KEY3
SEG2/KEY2
SEG1/KEY1
DIRECT ON/OFF
G.EDIT
FAN ON/OFF
VSX-D903S AND VSX-D933S:MULTI JOG
EXCEPT VSX-D903S AND VSX-D933S:TUNER JOG
AWZ5434 ONLY
D764 HSS104
FAN WATT
TUNED
T.DT
T.CLK
T.CE
RESET
D.GND
T.MUTE
SR MUTE
VH/VL
VL.LED
VL.UP
VL.DOWN
MUTING
S.BASS
RETURN
SELECT
ENTER
T.MEM
MPX
FM/AM
D.3CH
SFC
D.P.L
P.KEY
A.MEM
ASC1
ASC2
SP.A
SP.B
RECSEL
G.EDIT /DISP
MR&S
VCR1
VCR2
VIDEO
TV/SAT
LD
TAPE1
TAPE2
PHONO
TUNER
CD
DIRECT
AWZ5434 ONLY
J36 AKT1024
GND
-24V
REC ASSY CN36(→ SCH-9)
G.EDIT (OSD SUB ROOM)
DIRECT
Q704: LED ASSY
Q711: BUFFER
Q707,Q708: LED DRIVE
L701 LAU220K-TP
X702
S710 RESET
Q701:RESET
Q702,J703: REMOTE-SIGNAL BUFFER
Q705: INVERTER
Q706: LED DRIVE
Q710: LED DRIVE
STBY
MR&S
CN20 AKP-1106-A
12V
D.GND
5V
STBY 5V
-VF
FAN TEMP
MR.-RY
C.R.-RY
SP.B-RY
SP.A-RY
VH/VL
P.-RY
PROT.-RY
WP
FL1
FL2
FAN ON/OFF
POWER SUPPLY ASSY CN20(→ SCH-10)
J31 AKT1023
BUCK UP
GUI MUKAI
GUI-EN
GUI-CS
GUI-CLK
GUI-DT out
GUI-DT in
GUI-RESET
VOL DC
AWZ5434 ONLY
GUI ASSY CN31(→ SCH-4)
J16 AKT1012
A.MUTE
VL.DC
VL.LED
VL.UP
VL.DOWN
VOL ASSY CN16(→ SCH-6)

|  | S715 | S718 | S721 | S724 | S727 |
|---|---|---|---|---|---|
| VSX-D903S<br>VSX-D933S | SP.A | SP.B | RECSEL | G.EDIT /DISP | MR&S |
| VSX-D703S | SP.A | SP.B |  |  |  |
| VSX-D603S<br>VSX-D613S<br>VSX-D633S |  |  |  | SP.A | SP.B |
| VSX-53 | SP.A | SP.B | RECSEL | OSD SUB | MR&S |

|  | R712 |
|---|---|
| AWZ5438 | 1k |
| EXCEPT AWZ5438 | 10k |

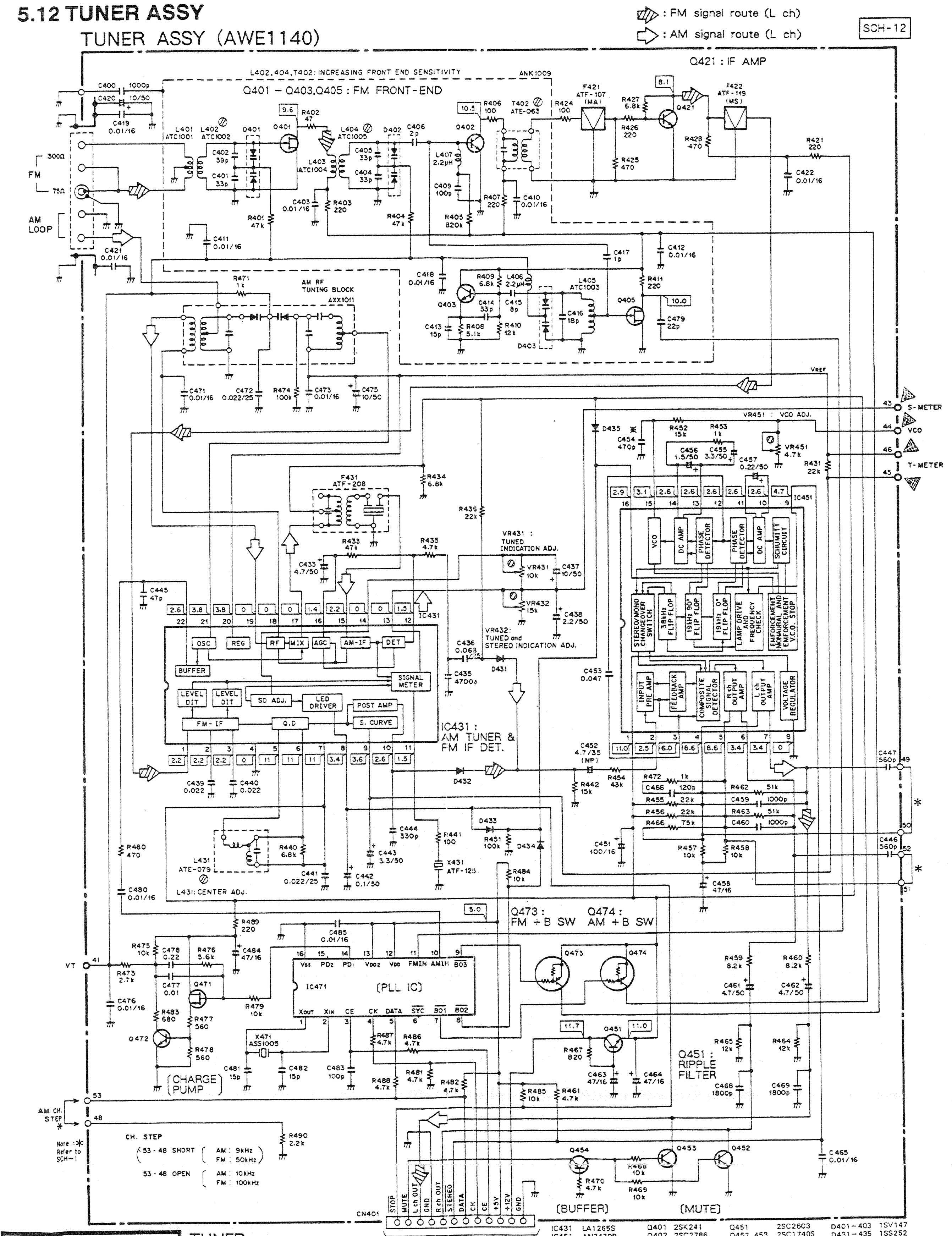
**SCH-11** FL U-COM ASSY

FL U-COM ASSY **SCH-11**

## 5.12 TUNER ASSY

TUNER ASSY (AWE1140)

SCH-12

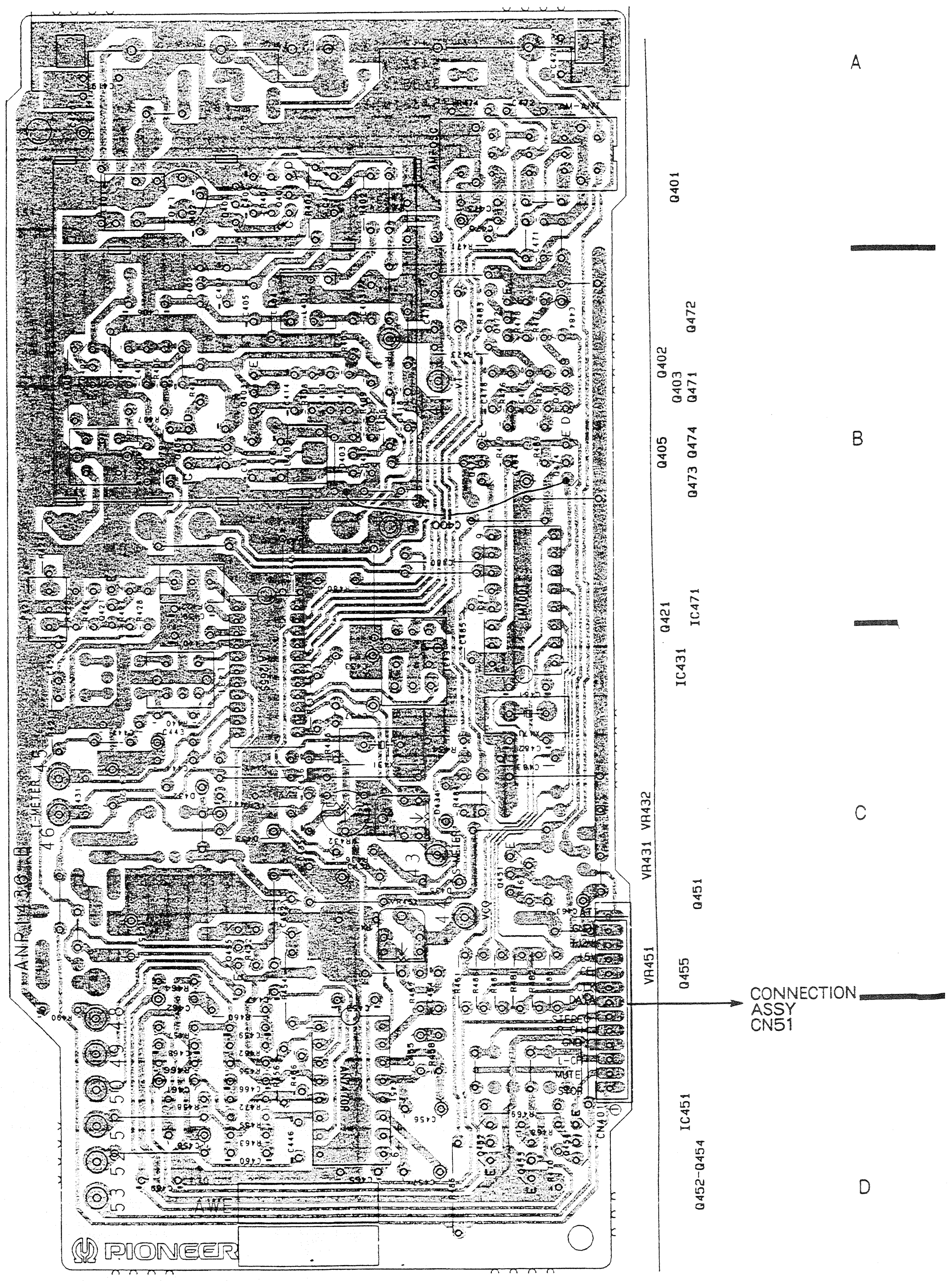

: FM signal route (L ch)
: AM signal route (L ch)
Q421 : IF AMP
L402,404,T402: INCREASING FRONT END SENSITIVITY
ANK1009
Q401 – Q403,Q405 : FM FRONT-END
FM 300Ω 75Ω
AM LOOP
AM RF TUNING BLOCK AXX1011
S-METER
VCO
T-METER
VR451 : VCO ADJ.
VR431 : TUNED INDICATION ADJ.
VR432 : TUNED and STEREO INDICATION ADJ.
IC451
VCO
DC AMP
PHASE DETECTOR
SCHMITT CIRCUIT
STEREO/MONO CHANGEOVER SWITCH
38kHz FLIP FLOP
19kHz 90° FLIP FLOP
LAMP DRIVER AND FREQUENCY CHECK
INPUT PRE AMP
FEEDBACK AMP
COMPOSITE SIGNAL DETECTOR
R ch OUTPUT AMP
L ch OUTPUT AMP
VOLTAGE REGULATOR
IC431
OSC
REG
RF
MIX
AGC
AM-IF
DET
BUFFER
SIGNAL METER
LEVEL DET
SD ADJ.
LED DRIVER
POST AMP
FM-IF
Q.D
S. CURVE
IC431 : AM TUNER & FM IF DET.
L431 : CENTER ADJ.
Q473 : FM +B SW
Q474 : AM +B SW
IC471 (PLL IC)
(CHARGE PUMP)
Q451 : RIPPLE FILTER
AM CH STEP
Note : * Refer to SCH-1
CH. STEP
53 - 48 SHORT { AM : 9kHz / FM : 50kHz }
53 - 48 OPEN { AM : 10kHz / FM : 100kHz }
(BUFFER)
(MUTE)
CN401
STOP
MUTE
L ch OUT
GND
R ch OUT
STEREO
DATA
CK
CE
+5V
+12V
GND
CONNECTION ASSY CN51 (➡SCH-5)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| IC431 | LA1265S | Q401 | 2SK241 | Q451 | 2SC2603 | D401 – 403 | 1SV147 |
| IC451 | AN7470P | Q402 | 2SC2786 | Q452, 453 | 2SC1740S | D431 – 435 | 1SS252 |
| IC471 | LM7001 | Q403 | 2SC2668 | Q454 | 2SA933S | | |
| | | Q405 | 2SK161 | Q471 | 2SK246 | | |
| | | Q421 | 2SC2668 | Q472 | 2SC1740SLN | | |
| | | | | Q473, 474 | RN2201 | | |

**SCH-12** TUNER ASSY

PCB-11

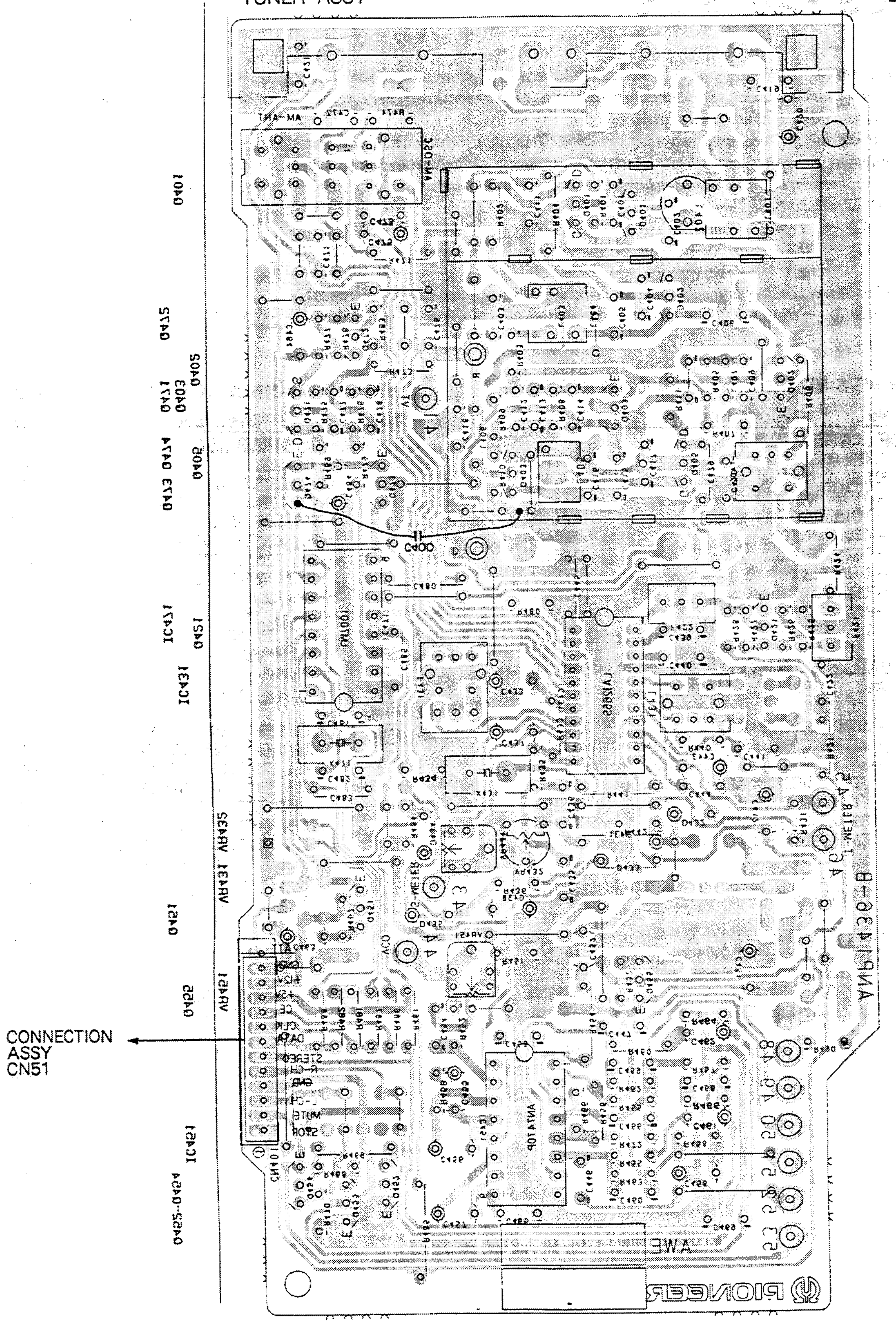
TUNER ASSY


Q401
Q472
Q402
Q403
Q471
Q405
Q473 Q474
Q421
IC431
IC471
VR431 VR432
Q451
VR451
Q455
CONNECTION ASSY CN51
IC451
Q452–Q454
PIONEER
ANP1436-B

- This diagram is viewed from the mounted parts side.

TUNER ASSY

PCB-11


TNA-MA
C400
CONNECTION ASSY CN51
+12V
+5V
CE
CLK
DATA
STEREO
R-CH
GND
L-CH
MUTE
STOP
ANP1450-B
PIONEER
AWE
A
B
C
D
1
2
3

- This diagram is viewed from the foil side.

# 6. PCB PARTS LIST

*NOTES:*

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

*Ex.1 When there are 2 effective digits(any digit apart from 0), such as 560 ohm and 47k ohm(tolerance is shown by J=5%, and K=10%).*

*560 Ω → 56 × $10^1$ → 561 ………………………… RD1/8PM$\boxed{5}\boxed{6}\boxed{1}$J*
*47k Ω → 47 × $10^3$ → 473 ………………………… RD1/4PS$\boxed{4}\boxed{7}\boxed{3}$J*
*0.5 Ω → 0R5 ………………………… RN2H$\boxed{0}\boxed{R}\boxed{5}$K*
*1 Ω → 010 ………………………… RS1P$\boxed{0}\boxed{1}\boxed{0}$K*

*Ex.2 When there are 3 effective digits(such as in high precision metal film resistors).*

*5.62k Ω → 562 × $10^1$ → 5621 ………………………… RN1/4PC$\boxed{5}\boxed{6}\boxed{2}\boxed{1}$F*

## • FOR VSX-D703S/KU AND VSX-D603S/KU

| Mark | No. | Description | Part No. |
|---|---|---|---|
| **LIST OF ASSEMBLIES** | | | |
| NSP | | TUNER ASSY | AWE1140 |
| NSP | | POWER SUPPLY AMP ASSY | AWK1794 |
| | | ├POWER AMP ASSY | AWZ5402 |
| | | ├PRIM ASSY | AWZ5405 |
| NSP | | ├TRANS ASSY | AWZ5406 |
| NSP | | ├FRONT SP ASSY | AWZ5413 |
| NSP | | ├R.C. SP ASSY | AWZ5414 |
| | | ├REG ASSY | AWZ5415 |
| | | ├POWER SUPPLY ASSY | AWZ5437 |
| NSP | | └R.C. MUTE ASSY | AWZ5707 |
| NSP | | SMALL SIGNAL ASSY(VSX-D703S) | AWK1797 |
| NSP | | SMALL SIGNAL ASSY(VSX-D603S) | AWK1799 |
| | | ├VOL ASSY | AWZ5421 |
| | | ├AUDIO FUNCTION ASSY | AWZ5422 |
| | | ├A/V FUNCTION ASSY(VSX-D703S) | AWZ5423 |
| | | ├A/V FUNCTION ASSY(VSX-D603S) | AWZ5429 |
| | | ├VIDEO FUNCTION ASSY(VSX-D703S) | AWZ5424 |
| | | ├VIDEO FUNCTION ASSY(VSX-D603S) | AWZ5430 |
| | | ├CONNECTION ASSY(VSX-D703S) | AWZ5425 |
| | | ├CONNECTION ASSY(VSX-D603S) | AWZ5428 |
| | | ├TONE ASSY | AWZ5426 |
| | | ├SR ASSY | AWZ5433 |
| NSP | | └F.MUTE ASSY | AWZ5708 |
| NSP | | FRONT ASSY(VSX-D703S) | AWK1802 |
| NSP | | FRONT ASSY(VSX-D603S) | AWK1803 |
| NSP | | ├F.VIDEO ASSY(VSX-D703S ONLY) | AWZ5435 |
| | | ├FL U-COM ASSY(VSX-D703S) | AWZ5605 |
| | | └FL U-COM ASSY(VSX-D603S) | AWZ5436 |
| | | PROLOGIC•SFC MODULE | AXQ1024 |

## • FOR VSX-D903S/KU AND VSX-53/KU/CA

| Mark | No. | Description | Part No. |
|---|---|---|---|
| **LIST OF ASSEMBLIES** | | | |
| NSP | | TUNER ASSY | AWE1140 |
| NSP | | POWER SUPPLY AMP ASSY(VSX-D903S) | AWK1789 |
| NSP | | POWER SUPPLY AMP ASSY(VSX-53) | AWK1839 |
| | | ├POWER AMP ASSY | AWZ5402 |
| | | ├REG ASSY(VSX-D903S) | AWZ5403 |
| | | ├REG ASSY(VSX-53) | AWZ5621 |
| | | ├POWER SUPPLY ASSY | AWZ5404 |
| | | ├PRIM ASSY | AWZ5405 |
| NSP | | ├TRANS ASSY | AWZ5406 |
| NSP | | ├FRONT SP ASSY | AWZ5407 |
| NSP | | ├R.C. SP ASSY | AWZ5408 |
| NSP | | ├SW ASSY | AWZ5412 |
| NSP | | └R.C. MUTE ASSY | AWZ5707 |
| NSP | | SMALL SIGNAL ASSY(VSX-D903S) | AWK1796 |
| NSP | | SMALL SIGNAL ASSY(VSX-53) | AWK1800 |
| | | ├AUDIO FUNCTION ASSY(VSX-D903S) | AWZ5416 |
| | | ├AUDIO FUNCTION ASSY(VSX-53) | AWZ5728 |
| | | ├A/V FUNCTION ASSY | AWZ5417 |
| | | ├VIDEO FUNCTION ASSY(VSX-D903S) | AWZ5418 |
| | | ├VIDEO FUNCTION ASSY(VSX-53) | AWZ5431 |
| | | ├CONNECTION ASSY(VSX-D903S) | AWZ5419 |
| | | ├CONNECTION ASSY(VSX-53) | AWZ5432 |
| | | ├TONE ASSY(VSX-D903S) | AWZ5420 |
| | | ├TONE ASSY(VSX-53) | AWZ5426 |
| | | ├VOL ASSY | AWZ5421 |
| NSP | | └F.MUTE ASSY | AWZ5708 |
| NSP | | FRONT ASSY(VSX-D903S) | AWK1801 |
| NSP | | FRONT ASSY(VSX-53) | AWK1804 |
| | | ├FL U-COM ASSY(VSX-D903S) | AWZ5434 |
| | | ├FL U-COM ASSY(VSX-53) | AWZ5438 |
| NSP | | └F.VIDEO ASSY | AWZ5435 |
| NSP | | SR & S.TERMINAL ASSY(VSX-D903S) | AWQ1024 |
| NSP | | SR & S.TERMINAL ASSY(VSX-53) | AWQ1026 |
| NSP | | GUI ASSY(VSX-D903S ONLY) | AWQ1025 |
| | | PROLOGIC•SFC MODULE | AXQ1029 |

## TUNER ASSY (AWE1140)

### SEMICONDUCTORS

| Mark | No. Description | Part No. |
|---|---|---|
| | IC451 | AN7470P |
| | IC431 | LA1265S |
| | IC471 | LM7001 |
| | Q454 | 2SA933S |
| | Q452, Q453 | 2SC1740S |
| | Q472 | 2SC1740SLN |
| | Q451 | 2SC2603 |
| | Q403, Q421 | 2SC2668 |
| | Q402 | 2SC2786 |
| | Q405 | 2SK161 |
| | Q401 | 2SK241 |
| | Q471 | 2SK246 |
| | Q473, Q474 | RN2201 |
| | D431-D435 | 1SS252 |
| | D401-D403 | 1SV147 |

### COILS, FILTERS AND TRANSFORMER

| Mark | No. Description | Part No. |
|---|---|---|
| | L401 | ATC1001 |
| | L402 | ATC1002 |
| | L405 | ATC1003 |
| | L403 | ATC1004 |
| | L404 | ATC1005 |
| | T402 | ATE-063 |
| | L431 | ATE-079 |
| | F421 | ATF-107 |
| | F422 | ATF-119 |
| | F431 | ATF-208 |
| | L406, L407 | LAU2R2M |

### CAPACITORS

| Mark | No. Description | Part No. |
|---|---|---|
| | C454 (470pF, 50V) | ACE1039 |
| | C466 | CCCSL121J50 |
| | C417 | CCDCH010C50 |
| | C406 | CCDCH020C50 |
| | C415 | CCDCH080D50 |
| | C413, C481, C482 | CCDCH150J50 |
| | C414 | CCDCH330J50 |
| | C401, C404, C405 | CCDRH330J50 |
| | C402 | CCDRH390J50 |
| | C416 | CCDTH180J50 |
| | C479 | CCPUSL220J50 |
| | C445 | CCPUSL470J50 |
| | C452 | CEANP4R7M35 |
| | C442 | CEASOR1M50 |
| | C420, C437, C475 | CEAS100M50 |
| | C451 | CEAS101M16 |
| | C456 | CEAS1R5M50 |
| | C438 | CEAS2R2M50 |
| | C443, C455 | CEAS3R3M50 |
| | C458, C463, C464, C484 | CEAS470M16 |
| | C433, C461, C462 | CEAS4R7M50 |
| | C457 | CEASR22M50 |
| | C478 | CFTXA224J50 |
| | C477 | CKCYF103Z50 |
| | C439, C440 | CKCYF223Z50 |
| | C435 | CKCYF472Z50 |
| | C453 | CKCYF473Z50 |
| | C436 | CKCYX683M25 |
| | C400 | CKDYF102Z50 |
| | C409, C483 | CKPUYB101K50 |
| | C444 | CKPUYB331K50 |
| | C441, C472 | CKPUYF223Z25 |
| | C403, C410-C412, C418, C419 | CKPUYY103N16 |
| | C421, C422, C465, C471, C473 | CKPUYY103N16 |
| | C476, C480, C485 | CKPUYY103N16 |
| | C459, C460 | CQMA102J50 |
| | C468, C469 | CQMA182J50 |
| | C446, C447 | CQMA561K50 |

### RESISTORS

| Mark | No. Description | Part No. |
|---|---|---|
| | VR451 (4.7kΩ) | ACP1042 |
| | VR431 (10kΩ) | ACP1043 |
| | VR432 | VRTS6VS153 |
| | Other Resistors | RD1/8PM□□□J |

### OTHERS

| Mark | No. Description | Part No. |
|---|---|---|
| | ANTENNA TERMINAL 4-P | AKA1014 |
| | X471 CRYSTAL RESONATOR (7.200MHz) | ASS1005 |
| | X431 CERAMIC FILTER | ATF-125 |
| | AM RF TUNING BLOCK | AXX1011 |
| | CN401 12P SOCKET | KP200IA12L |

## POWER AMP ASSY (AWZ5402)

### SEMICONDUCTORS

| Mark | No. Description | Part No. |
|---|---|---|
| | Q107, Q108, Q164 | 2SA1145 |
| | Q103, Q104, Q162, Q201 | 2SA1240 |
| | Q115, Q116, Q168, Q205 | 2SA1837 |
| | Q105, Q106, Q163 | 2SA970 |
| | Q101, Q102, Q161 | 2SC1845 |
| | Q117, Q118, Q169, Q206 | 2SC2240 |
| | Q111, Q112, Q166, Q203 | 2SC2603 |
| | Q109, Q110, Q165, Q202 | 2SC2705 |
| | Q113, Q114, Q167, Q204 | 2SC4793 |
| | D101-D108, D111-D114 | HSS104-02 |
| | D117-D122, D161-D164 | HSS104-02 |
| | D166, D167, D169-D171 | HSS104-02 |
| | D204-D206 | HSS104-02 |
| | D201 | RD10ESB |
| | D202, D203 | RD4.3ESB |
| | D109, D110, D115, D116, D165 | RD8.2ESB2 |
| | D168 | RD8.2ESB2 |

### COILS

| Mark | No. Description | Part No. |
|---|---|---|
| | L101, L102, L161, L201 (0.7μH) | ATH1004 |

### CAPACITORS

| Mark | No. Description | Part No. |
|---|---|---|
| | C117, C118, C169 | CCCSL050C500 |
| | C105-C108, C163, C164 | CCCSL101J50 |
| | C212, C213 | CCCSL101K500 |
| | C113, C114 | CCCSL150K500 |
| | C121-C124, C171, C172 | CCCSL151K500 |
| | C167, C208 | CCCSL220K500 |
| | C204, C205 | CCCSL470J50 |
| | C129, C130, C175 | CEANP010M50 |
| | C216 | CEANP2R2M50 |
| | C201, C202 | CEAS2R2M50 |

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C111, C112, C166, C207 | | CEAS470M16 |
| | C210 | | CEAS470M25 |
| | C161 | | CEAS4R7M50 |
| | C125, C126, C173, C214 | | CFTXA473J50 |
| | C119, C120, C170, C211 | | CKCYB102K50 |
| | C162 | | CKCYB122K50 |
| | C203 | | CKCYB222K50 |
| | C103, C104 | | CKCYB471K50 |
| | C109, C110, C165, C206 | | CQMA392J50 |
| **RESISTORS** | | | |
| | R145, R146, R183, R222 | (0.33Ω, 5W) | ACN1087 |
| | R115, R116, R168, R207 | | RD1/4PM152J |
| | R117, R118, R169, R208 | | RD1/4PM473J |
| | R147, R148, R151, R152, R184 | | RD1/4PMF100J |
| | R186, R223, R229 | | RD1/4PMF100J |
| | R129-R136, R175-R178 | | RD1/4PMF101J |
| | R214-R217 | | RD1/4PMF101J |
| | R153-R156, R187, R188 | | RD1/4PMF222J |
| | R225, R226 | | RD1/4PMF222J |
| | R139-R142, R180, R181 | | RD1/4PMF4R7J |
| | R220, R221 | | RD1/4PMF4R7J |
| | R121, R122, R171 | | RD1/4PMF680J |
| | R111-R114, R166, R167 | | RFA1/4PS391J |
| | R127, R128, R174, R210 | | RFA1/4PS470J |
| | R137, R138, R143, R144, R179 | | RFA1/4PS4R7J |
| | R182, R218, R219 | | RFA1/4PS4R7J |
| | Other Resistors | | RD1/8PM□□□J |
| **OTHERS** | | | |
| | | CABLE HOLDER(3P) | AKT1076 |
| | | CABLE HOLDER(8P) | AKT1081 |
| | | CABLE HOLDER(9P) | AKT1082 |
| | CN17, CN18 | 7P PLUG | KM200IB7 |

## PRIM ASSY (AWZ5405)

| | | | |
|---|---|---|---|
| **SEMICONDUCTORS** | | | |
| | IC51 | | NJM78M56FAS |
| | Q51 | | XDC143ES |
| | D51 | | HSS104-02 |
| | D54 | | HZS6A1L |
| | D53 | | S1WB20 |
| | D52 | | S5566 |
| **COIL** | | | |
| ⚠ | L51 | | ATF1006 |
| **TRANSFORMER** | | | |
| ⚠ | T51 | | ATT1011 |
| **RELAY** | | | |
| ⚠ | RY51 | | ASR1036 |
| **CAPACITORS** | | | |
| ⚠ | C51, C52 | (0.01μ, AC400V) | ACG1002 |
| | C53 | | CEAS102M25 |
| | C55 | | CEAS470M16 |
| | C54 | | CKCYB103K50 |

| Mark | No. | Description | Part No. |
|---|---|---|---|
| **RESISTORS** | | | |
| ⚠ | R52 | (2.2MΩ, 1/2W) | ACN-208 |
| ⚠ | R53 | | RD1/4PMF332J |
| ⚠ | R51 | | RD1/4PMF4R7J |
| | Other Resistors | | RD1/8PM□□□J |
| **OTHERS** | | | |
| | | AC OUTLET(3P) | AKP1053 |
| | CN22 | CONNECTOR(4P) | KPC4 |

## TRANS ASSY (AWZ5406)

| | | | |
|---|---|---|---|
| **RESISTORS** | | | |
| ⚠ | R379, R380 | | RFA1/4PL4R7J |
| **OTHERS** | | | |
| | | CABLE HOLDER(8P) | AKT1081 |

## FRONT SP ASSY (AWZ5413)

| | | | |
|---|---|---|---|
| **SEMICONDUCTORS** | | | |
| | Q281, Q282 | | XDC143ES |
| | D281, D282 | | HSS104-02 |
| **RELAYS** | | | |
| | RY281, RY282 | | ASR-112 |
| **RESISTORS** | | | |
| | R281, R282 | | RS1PMF821J |
| **OTHERS** | | | |
| | CN8004 | SPEAKER TERMINAL 8-P | AKE1048 |
| | CN26 | CONNECTOR(4P) | KPC4 |
| | CN25 | CONNECTOR(8P) | KPC8 |
| | CN27 | CONNECTOR(4P) | KPE4 |
| | CN24 | CONNECTOR(6P) | KPE6 |

## R. C. SP ASSY (AWZ5414)

| | | | |
|---|---|---|---|
| **SEMICONDUCTORS** | | | |
| | Q271 | | XDC143ES |
| | D271 | | HSS104-02 |
| **RELAY** | | | |
| | RY271 | | ASR-112 |
| **RESISTORS** | | | |
| | R273 | | RS1PMF821J |
| | Other Resistors | | RD1/8PM□□□J |
| **OTHERS** | | | |
| | CN8007 | PIN JACK 1-P | AKB1139 |
| | | SPEAKER TERMINAL 4-P | AKE-109 |
| | CN8016 | SPEAKER TERMINAL 2-P | AKE1041 |
| | | CABLE HOLDER(4P) | AKT1077 |

## REG ASSY (AWZ5415)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC251 | | NJM78M12FAS |
| | IC252 | | NJM79M12FA |
| | Q256, Q257, Q261 | | 2SA1048 |
| | Q258 | | 2SC2458 |
| | Q251 | | 2SC4793 |
| | Q253, Q260 | | 2SD438 |
| | Q254, Q255, Q259 | | XDA124ES |
| | D257 | | HZS22-3L |
| | D260 | | HZS6B2L |
| | D258, D261 | | RD13ESB3 |
| | D251-D254 | | S5566 |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C251 | (0.01μ, AC250V) | ACG1005 |
| | C259, C260, C262 | | CEAS101M25 |
| | C261 | | CEAS102M16 |
| | C253 | | CEAS102M35 |
| | C252 | | CEAS222M35 |
| | C255, C266 | | CEAS470M25 |
| | C256-C258 | | CKCYF103Z50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R256 | | RD1/4PMF122J |
| | R251 | | RFA1/4PS470J |
| | R286 | | RS1PMF100J |
| | R261 | | RS1PMF121J |
| | R253 | | RS1PMF220J |
| | R276 | | RS2LMF151J |
| | R254, R255, R283 | | RS2LMF180J |
| | R252 | | RT5PD180K |
| | Other Resistors | | RD1/8PM□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | | SCREW | ABA-298 |
| | CN15, CN19 | CONNECTOR(10P) | KPC10 |
| | CN8018 | CONNECTOR(4P) | KPC4 |
| | CN201 | CONNECTOR(3P) | KPE3 |

## POWER SUPPLY ASSY (AWZ5437)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | Q366 | | 2SA1515 |
| | Q362, Q364, Q365, Q368 | | 2SC2458 |
| | Q367 | | XDA143ES |
| | Q363 | | XDC124ES |
| | Q361 | | XDC143ES |
| | D362 | | D3SBA20 |
| | D351, D352 | | D5SB20F |
| | D361, D366, D369 | | HSS104-02 |
| | D367 | | HZS5BLL |
| | D365 | | RD6.2ESB |
| | D363, D364 | | S5566 |

### RELAYS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | RY361, RY362 | | ASR1027 |
| | RY363 | | ASR1035 |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C351, C352, C361 | (0.01μ, AC250V) | ACG1005 |
| | C362, C363 | (5600μ, 50V) | ACH1145 |
| | C353 | (12000μ, 80V) | ACH1263 |
| | C354 | (12000μ, 80V) | ACH1264 |
| | C367 | | CEAS101M35 |
| | C364 | | CEAS220M50 |
| | C365 | | CEAS221M16 |
| | C366 | | CEAS330M25 |
| | C368 | | CKCYF103Z50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R362 | | RD1/2PMF102J |
| | R366 | | RD1/4PMF2R2J |
| | R368 | | RD1/4PMF822J |
| | R361 | | RS1PMF471J |
| | R372 | | RS1PMF821J |
| | R373, R374 | | RS2LMF331J |
| | Other Resistors | | RD1/8PM□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | | HEADPHONE JACK | AKN1002 |
| | CN20 | 18P SOCKET | AKP1102 |
| | | CABLE HOLDER(3P) | AKT1076 |
| | | CABLE HOLDER(4P) | AKT1077 |
| | | CABLE HOLDER(9P) | AKT1082 |
| | | CABLE HOLDER(10P) | AKT1083 |
| | CN23 | JUMPER CONNECTOR(8P) | KPC8 |

## R. C. MUTE ASSY (AWZ5707)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | Q575, Q576 | | 2SC2878 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | All Resistors | | RD1/8PM□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | | CABLE HOLDER (4P) | AKT1077 |
| | CN118 | 7P SOCKET | KP200IB7L |

## VOL ASSY (AWZ5421)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC5571 | | M5220P |
| | IC5573 | | TA8409S |
| | IC5572 | | XRA4558N-P |
| | Q5591 | | 2SA1115 |
| | Q5573 | | XDC124ES |
| | D5571-D5574 | | HSS104-02 |
| | D5578 | | RD3.3ESB2 |
| | D5579 | | RD5.1ESB1 |
| | D5575, D5576 | | RD5.1ESB2 |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C5573, C5574 | | CCCCH330J50 |
| | C5579 | | CEANP101M10 |
| | C5581-C5583 | | CEAS100M50 |
| | C5580 | | CEAS101M16 |
| | C5571, C5572, C5575, C5576 | | CEAS4R7M50 |
| | C5577, C5578 | | CEASR47M50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R5593 | | RD1/2PM470J |
| | R5596, R5597 | | RD1/4PM221J |
| | R5595 | | RD1/4PM561J |
| | R5592 | | RD1/4PM621J |
| | VR5571 | | ACX1095 |
| | Other Resistors | | RD1/8PM□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | | CABLE HOLDER(4P) | AKT1077 |
| | CN156 | 15P SOCKET | KP200IB15L |
| | CN16 | CONNECTOR(5P) | KPE5 |

## AUDIO FUNCTION ASSY (AWZ5422)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC404 | | M5220P |
| | IC401 | | TC9164N |
| | IC403 | | XRA4558-P |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C447 | | CCSQCH102J50 |
| | C419, C420 | | CCSQCH221J50 |
| | C417, C418 | | CCSQCH681J50 |
| | C423, C424 | | CCSQSL101J50 |
| | C415, C416 | | CEAS100M50 |
| | C431, C432 | | CEAS101M16 |
| | C433, C434, C439, C440 | | CEAS2R2M50 |
| | C421, C422 | | CEAS470M25 |
| | C445, C446 | | CEAS4R7M50 |
| | C435, C436 | | CKSQYB103K50 |
| | C1400, C429, C430, C441, C444 | | CKSQYF103Z50 |
| | C427, C428 | | CQMA242J50 |
| | C425, C426 | | CQMA822J50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | All Resistors | | RS1/10S□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | | PIN JACK(6P) | AKB1121 |
| | CN8207 | PIN JACK(6P) | AKB1129 |
| | | CABLE HOLDER(11P) | AKT1084 |
| | CN152 | 13P SOCKET | KP200IB13L |

## A/V FUNCTION ASSY (AWZ5423 and AWZ5429)

### SEMICONDUCTOR

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC451 | | TC9163N |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C487 | | CCSQCH102J50 |
| | C481, C482 | | CEAS470M25 |
| | C475, C476 | | CKSQYB103K50 |
| | C1450, C483, C484 | | CKSQYF103Z50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | All Resistors | | RS1/10S□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | | PIN JACK(4P) (AWZ5423 ONLY) | AKB1101 |
| | | PIN JACK(4P) | AKB1124 |
| | CN2 | PLUG 3-P (AWZ5423 ONLY) | KM250MA3L |
| | CN153 | 10P SOCKET | KP200IB10L |
| | CN11 | L-CONNECTOR(11P) | KPD11L |
| | CN98 | PIN JACK(6P)(AWZ5429 ONLY) | AKB1129 |

## VIDEO FUNCTION ASSY (AWZ5424)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC502 | | LA7951 |
| | IC507 | | M50554-003SP |
| | IC1502 | | M66320FP |
| | IC506 | | MM1067XD |
| | IC501 | | NJM2233BLA |
| | IC1503 | | UPC78L05J |
| | Q504 | | 2SA1048 |
| | Q505-Q507 | | 2SA1115 |
| | Q508 | | 2SC2412K |
| | Q503 | | 2SC2458 |
| | Q501, Q502, Q510 | | XDC124ES |
| | D505, D506 | | 1SS352 |
| | D501, D502 | | HSS104-02 |

### COILS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | L506 | | LAU150J |
| | L507, L508 | | LAU270J |
| | L501, L502, L509-L511 | | LAU680J |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | TC501 | | ACM-020 |
| | C558, C559, C562 | | CCSQCH050C50 |
| | C540, C546 | | CCSQCH101J50 |
| | C1526 | | CCSQCH102J50 |
| | C542, C544 | | CCSQCH150J50 |
| | C549, C551 | | CCSQCH220J50 |
| | C535 | | CCSQCH221J50 |
| | C543 | | CCSQCH330J50 |
| | C1529 | | CCSQCH331J50 |
| | C534 | | CCSQCH471J50 |
| | C532 | | CCSQCH561J50 |
| | C526, C530, C531 | | CEAS010M50 |
| | C527, C547 | | CEAS100M50 |
| | C1506 | | CEAS101M10 |
| | C507 | | CEAS101M16 |

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C537 | | CEAS2R2M50 |
| | C501-C506, C509, C511, C538 | | CEAS470M25 |
| | C552, C553, C557 | | CEAS470M25 |
| | C563 | | CEAS471M10 |
| | C560, C561 | | CEAS471M6 |
| | C536 | | CEASR47M50 |
| | C1524 | | CEJA100M16 |
| | C1505, C545 | | CKSQYB102K50 |
| | C533 | | CKSQYB332K50 |
| | C1507, C1521, C508, C510, C528 | | CKSQYF103Z50 |
| | C539, C548, C550, C554-C556 | | CKSQYF103Z50 |
| | C541 | | CKSQYF104Z50 |
| | C529 | | CKSQYF473Z50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R541, R542 | | RD1/2PM331J |
| | R548 | | RD1/2PM271J |
| | R1504 | | RD1/4PM680J |
| | Other Resistors | | RS1/10S□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | CN8111 | PIN JACK(2P) | AKB1118 |
| | | PHONO JACK 2-P | AKB1134 |
| | CN6 | 3P RCA PINJACK | AKB1143 |
| | X502 | CRYSTAL RESONATOR (14.31818MHz) | ASS1056 |
| | X501 | CERAMIC RESONATOR(503kHz) | ASS1112 |
| | CN3 | PLUG 3-P | KM250MA3L |
| | CN154 | 16P SOCKET | KP200IB16L |
| | CN199 | 9P SOCKET | KP200IB9L |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | | PHONO JACK 2-P | AKB1134 |
| | CN6, CN8111 | 3P RCA PINJACK | AKB1143 |
| | CN154 | 12P SOCKET | KP200IB12L |
| | CN199 | 9P SOCKET | KP200IB9L |

## CONNECTION ASSY (AWZ5425 and AWZ5428)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | D552 | | HSS104-02 |
| | D551 | | RD5.1ESB2 |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C2551 | | CCSQCH102J50 |
| | C1551 | | CEAS101M16 |
| | C1552 | | CEAS470M25 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R552 | | RD1/2PM181J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | CN114 | SOCKET(27P) | AKP1099 |
| | CN51 | 12P PLUG | KM200IB12 |
| | CN52 | 13P PLUG | KM200IB13 |
| | CN54 | 16P PLUG (AWZ5425) | KM200IB16 |
| | CN54 | 12P PLUG (AWZ5428) | KM200IB12 |
| | CN99 | 9P PLUG | KM200IB9 |
| | CN53 | 10P PLUG | KM200IB10 |

## VIDEO FUNCTION ASSY (AWZ5430)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC502 | | LA7951 |
| | IC1502 | | M66320FP |
| | IC501 | | NJM2233BLA |
| | IC1503 | | UPC78L05J |
| | Q505, Q506 | | 2SA1115 |
| | Q508 | | 2SC2412K |

### COILS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | L501, L502, L509, L510 | | LAU680J |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C558, C559 | | CCSQCH050C50 |
| | C1526 | | CCSQCH102J50 |
| | C1506 | | CEAS101M10 |
| | C507 | | CEAS101M16 |
| | C501-C506, C509, C511 | | CEAS470M25 |
| | C552, C553 | | CEAS470M25 |
| | C563 | | CEAS471M10 |
| | C560, C561 | | CEAS471M6 |
| | C1505 | | CKSQYB102K50 |
| | C1507, C1521, C508, C510 | | CKSQYF103Z50 |
| | C554, C555 | | CKSQYF103Z50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R541, R542 | | RD1/2PM331J |
| | R1504 | | RD1/4PM680J |
| | Other Resistors | | RS1/10S□□□J |

## TONE ASSY (AWZ5426)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC573 | | M5220P |
| | IC571 | | TC9162N |
| | IC572, IC574 | | XRA4558N-P |
| | Q577 | | 2SA1115 |
| | Q571-Q574 | | 2SC2458 |
| | D571-D574, D577-D580 | | HSS104-02 |
| | D575, D576 | | RD5.1ESB2 |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C591, C592 | | CCSQCH151J50 |
| | C573, C574 | | CEAS010M50 |
| | C585, C586, C589, C590 | | CEAS100M50 |
| | C599, C600 | | CEAS100M50 |
| | C571, C572, C587, C588 | | CEAS4R7M50 |
| | C593, C594 | | CEAS4R7M50 |
| | C577, C578, C595, C596 | | CEASR47M50 |
| | C575, C576 | | CFTXA154J50 |
| | C579, C580 | | CFTXA473J50 |
| | C605 | | CKDYF103Z50 |
| | C583, C584 | | CKPUYB151K50 |
| | C597, C598 | | CKSQYB103K50 |
| | C601 | | CKSQYB471K50 |
| | C581, C582 | | CQMA153J50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R627, R628 | | RD1/4PM221J |
| | R1597 | | RS1/10S000J |
| | R622-R624 | | RS1/10S102J |
| | R575, R576, R629, R630 | | RS1/10S104J |
| | R605, R606 | | RS1/10S223J |
| | R601, R602 | | RS1/10S473J |
| | R603, R604 | | RS1/10S562J |
| | VR573 (10kΩ × 2) | | ACS1029 |
| | VR571, VR572 (30kΩ × 2) | | ACS1115 |
| | Other Resistors | | RD1/8PM□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | | CABLE HOLDER (10P) | AKT1083 |
| | CN55, CN56 | 15P PLUG | KM200IB15 |
| | CN13 | CONNECTOR (15P) | KPE15 |

## SR ASSY (AWZ5433)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | Q656, Q657 | | 2SA1048 |
| | Q655 | | 2SC2458 |
| | D651-D653, D655-D657 | | HSS104-02 |
| | D654 | | RD5.1ESB |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | All Resistors | | RS1/10S□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | CN651 | 2P MINI JACK | AKN1006 |
| | | MINI JACK | AKN1020 |
| | CN12 | CONNECTOR (9P) | KPE9 |

## F. MUTE ASSY (AWZ5708)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | Q5571, Q5572 | | 2SC2878 |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C101, C102 | | CEAS4R7M50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | All Resistors | | RD1/8PM□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | | CABLE HOLDER (4P) | AKT1077 |
| | CN117 | 7P SOCKET | KP200IB7L |

## F. VIDEO ASSY (AWZ5435)

### CAPACITOR

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C710 | | CKCYX104M16 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | All Resistors | | RD1/8PM□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | | PIN JACK (1P) | AKB1082 |
| | CN1 | PLUG 5-P | KM250MA5 |

## FL U-COM ASSY (AWZ5605 and AWZ5436)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC701 | | PDG117B |
| | Q702, Q703, Q705-Q707 | | 2SC2458 |
| | Q701 | | XDC124ES |
| | D735, D736 | | AEL1100 |
| | D734 | | AEL1151 |
| | D701-D710, D715, D716 | | HSS104-02 |
| | D721, D722, D727, D728, D733 | | HSS104-02 |
| | D740-D743, D761, D763 | | HSS104-02 |

### COIL

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | L701 | | LAU220K |

### SWITCHES

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | S701-S714, S716, S717, S719, S720 | | ASG1034 |
| | S722, S723, S725, S726, S728-S732 | | ASG1034 |
| | S715, S718 (AWZ5605 ONLY) | | ASG1034 |
| | S724, S727 (AWZ5436 ONLY) | | ASG1034 |
| | S733 | | ASX1015 |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C707 (47μ, 5.5V) | | ACH1246 |
| | C704, C706 | | CEAS010M50 |
| | C702 | | CEAS101M10 |
| | C708 | | CEAS470M50 |
| | C701 | | CEJA010M50 |
| | C705, C709 | | CKCYX473M25 |
| | C703 | | CKPUYF473Z16 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R743 | | RD1/4PM221J |
| | Other Resistors | | RD1/8PM□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | V701 | FL TUBE | AAV1196 |
| | CN14 | SOCKET (27P) | AKP1100 |
| | CN20 | 18P SOCKET | AKP1106 |
| | X701 | CERAMIC RESONATOR (8.00MHz) | ASS1015 |
| | | REMOTE RECEIVER UNIT | AXX1023 |

## PROLOGIC • SFC MODULE (AXQ1024)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC2001 | | LA2785 |
| | IC2007 | | LC32464M-80 |
| | IC2008, IC2018 | | LC78835M |
| | IC2003-IC2006, IC2010, IC2011, IC2013 | | NJM4558M-D |
| | IC2017 | | NJM4558M-D |
| | IC2019 | | NJM78M05FAS |
| | IC2002 | | NJM78M09FAS |
| | IC2012 | | PDC017C |
| | IC2015 | | PDC018A |
| | IC2014 | | TC9162N |
| | Q2001 | | 2SA1162 |
| | Q2002 | | DTC124EK |
| | D2001, D2002, D2004 | | 1SS226 |

### COILS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | L2004, L2006, L2010, L2014 | | ATX1008 |
| | L2013, L2015 | | LCTAR22J3225 |
| | L2003, L2005 | | LTA102J |
| | L2011, L2012 | | LTA473J |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C2168 | | CCSQCH040C50 |
| | C2084, C2085 | | CCSQCH080D50 |
| | C2036, C2108, C2113 | | CCSQCH101J50 |
| | C2041, C2042 | | CCSQCH102J50 |
| | C2164, C2167 | | CCSQCH150J50 |
| | C2163 | | CCSQCH470J50 |
| | C2043, C2044, C2080, C2081 | | CCSQCH471J50 |
| | C2082, C2083 | | CCSQCH680J50 |
| | C2018, C2021 | | CEANL3R3M50 |
| | C2014, C2016, C2023, C2025 | | CEANL4R7M50 |
| | C2122, C2126 | | CEANP101M16 |
| | C2072, C2073 | | CEAS010M50 |
| | C2047, C2048, C2053, C2058, C2064 | | CEAS100M50 |
| | C2102, C2104, C2106, C2130, C2135 | | CEAS100M50 |
| | C2060, C2066, C2153 | | CEAS101M10 |
| | C2105 | | CEAS220M16 |
| | C2068, C2069 | | CEAS220M25 |
| | C2037, C2166 | | CEAS221M10 |
| | C2003, C2008, C2123, C2127 | | CEAS221M16 |
| | C2051, C2052, C2054, C2067, C2103 | | CEAS2R2M50 |
| | C2076, C2077 | | CEAS330M16 |
| | C2039 | | CEAS331M16 |
| | C2029, C2056, C2092 | | CEAS470M10 |
| | C2112 | | CEAS470M25 |
| | C2138 | | CEAS471M10 |
| | C2004-C2007, C2009, C2010 | | CEJA100M16 |
| | C2032-C2034 | | CEJA100M16 |
| | C2013, C2015, C2024, C2026 | | CEJAR47M50 |
| | C2011, C2012, C2027, C2028 | | CFTXA104J50 |
| | C2019, C2020 | | CFTXA154J50 |
| | C2030 | | CFTXA474J50 |
| | C2017, C2022 | | CFTYA154J50 |
| | C2070, C2071, C2097 | | CKSQYB102K50 |
| | C2078, C2079, C2086, C2087 | | CKSQYB103K50 |
| | C2090, C2091, C2111 | | CKSQYB103K50 |
| | C2158, C2159, C2161, C2162 | | CKSQYB104K25 |
| | C2140-C2142 | | CKSQYB182K50 |
| | C2045, C2046, C2100 | | CKSQYB222K50 |
| | C2101 | | CKSQYB471K50 |
| | C2074, C2075, C2095, C2110, C2155 | | CKSQYB472K50 |
| | C2055, C2057, C2089, C2093, C2165 | | CKSQYB473K25 |
| | C2038, C2040, C2154 | | CKSQYB473K50 |
| | C2031, C2059, C2061, C2062, C2065 | | CKSQYF104Z50 |
| | C2096, C2107, C2109, C2129, C2134 | | CKSQYF104Z50 |
| | C2136 | | CKSQYF104Z50 |
| | C2001 | | CQMA223J50 |
| | C2002 | | CQMA473J50 |
| | C2035 | | CQMA681J50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R2148 | | RD1/2PMFL4R7J |
| | | Other Resistors | RS1/10S□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | X2002 | CERAMIC RESONATOR(4.19MHz) | ASS1018 |
| | X2001 | CRYSTAL RESONATOR(22.5792MHz) | ASS1114 |
| | CN2001 | 15P SOCKET | KP200IB15L |

## REG ASSY (AWZ5403 and AWZ5621)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC251 | | NJM78M12FAS |
| | IC252 | | NJM79M12FA |
| | Q256, Q257, Q261 | | 2SA1048 |
| | Q258 | | 2SC2458 |
| | Q251 | | 2SC4793 |
| | Q252(AWZ5403 ONLY) | | 2SC4793 |
| | Q253, Q260 | | 2SD438 |
| | Q254, Q255, Q259 | | XDA124ES |
| | D257 | | HZS22-3L |
| | D260 | | HZS6B2L |
| | D259(AWZ5403 ONLY) | | HZS6C2L |
| | D258, D261 | | RD13ESB3 |
| | D251-D254 | | S5566 |
| | D255, D256(AWZ5403 ONLY) | | S5566 |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C251 | (0.01μ, AC250V) | ACG1005 |
| | C259, C260, C262 | | CEAS101M25 |
| | C265(AWZ5403 ONLY) | | CEAS101M25 |
| | C261 | | CEAS102M16 |
| | C253 | | CEAS102M35 |
| | C254(AWZ5403 ONLY) | | CEAS102M35 |
| | C252 | | CEAS222M35 |
| | C255, C266 | | CEAS470M25 |
| | C264(AWZ5403 ONLY) | | CEAS471M10 |
| | C256-C258 | | CKCYF103Z50 |
| | C263(AWZ5403 ONLY) | | CKCYF103Z50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R259(AWZ5403 ONLY) | | RD1/4PMF272J |
| | R256 | | RD1/4PMF751J |
| | R251 | | RFA1/4PS470J |
| | R286 | | RS1PMF100J |
| | R261 | | RS1PMF121J |

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R253 | | RS1PMF220J |
| | R276 | | RS2LMF151J |
| | R284(AWZ5621 ONLY) | | RT5PD100K |
| | R252 | | RT5PD180K |
| | R257(AWZ5403 ONLY) | | RT5PD470K |
| | Other Resistors | | RD1/8PM□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | | SCREW(AWZ5403 ONLY) | ABA-298 |
| | CN15, CN19 | CONNECTOR(10P) | KPC10 |
| | CN8018 | CONNECTOR(4P) | KPC4 |
| | CN201 | CONNECTOR(3P) | KPE3 |
| | CN36 | CONNECTOR(3P) (AWZ5403 ONLY) | KPE3 |

## POWER SUPPLY ASSY (AWZ5404)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | Q366 | | 2SA1515 |
| | Q362, Q364, Q365, Q368 | | 2SC2458 |
| | Q367 | | XDA143ES |
| | Q363 | | XDC124ES |
| | Q361 | | XDC143ES |
| | D362 | | D3SBA20 |
| | D351, D352 | | D5SB20F |
| | D361, D366, D369 | | HSS104-02 |
| | D367 | | HZS5BLL |
| | D365 | | RD6.2ESB |
| | D363, D364 | | S5566 |

### RELAYS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | RY361, RY362 | | ASR1027 |
| | RY363 | | ASR1035 |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C351, C352, C361 | (0.01μ, AC250V) | ACG1005 |
| | C362, C363 | (5600μ, 50V) | ACH1145 |
| | C353 | (12000μ, 80V) | ACH1263 |
| | C354 | (12000μ, 80V) | ACH1264 |
| | C367 | | CEAS101M35 |
| | C364 | | CEAS220M50 |
| | C365 | | CEAS221M16 |
| | C366 | | CEAS330M25 |
| | C368 | | CKCYF103Z50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R362 | | RD1/2PMF102J |
| | R366 | | RD1/4PMF2R2J |
| | R368 | | RD1/4PMF822J |
| | R361 | | RS1PMF471J |
| | R372 | | RS1PMF821J |
| | R373, R374 | | RS2LMF331J |
| | Other Resistors | | RD1/8PM□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | | JACK | AKN1002 |
| | CN20 | 18P SOCKET | AKP1102 |
| | | CABLE HOLDER(3P) | AKT1076 |
| | | CABLE HOLDER(4P) | AKT1077 |
| | | CABLE HOLDER(9P) | AKT1082 |
| | | CABLE HOLDER(10P) | AKT1083 |
| | | JUMPER CONNECTOR | KPC8 |

## FRONT SP ASSY (AWZ5407)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | Q281, Q282 | | XDC143ES |
| | D281, D282 | | HSS104-02 |

### SWITCH AND RELAYS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | S281 | | AKX1033 |
| | RY281, RY282 | | ASR-112 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R281, R282 | | RS1PMF821J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | | SPEAKER TERMINAL 8-P | AKE1011 |
| | CN26 | CONNECTOR(7P) | KPC7 |
| | CN25 | JUMPER CONNECTOR | KPC8 |
| | CN27 | CONNECTOR(4P) | KPE4 |
| | CN24 | CONNECTOR(6P) | KPE6 |

## R. C. SP ASSY (AWZ5408)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | Q271, Q272 | | XDC143ES |
| | D271, D272 | | HSS104-02 |

### RELAYS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | RY271, RY272 | | ASR-112 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R273, R274 | | RS1PMF821J |
| | Other Resistors | | RD1/8PM□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | CN8007 | PIN JACK 1-P | AKB1139 |
| | | SPEAKER TERMINAL 8-P | AKE-111 |
| | | SPEAKER TERMINAL 4-P | AKE1055 |
| | | CABLE HOLDER(7P) | AKT1080 |

## SW ASSY (AWZ5412)

### SWITCH

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | S111 | | ASH1043 |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | CN29 | CONNECTOR(3P) | KPE3 |

## AUDIO FUNCTION ASSY (AWZ5416 and AWZ5728)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC404 | | M5220P |
| | IC402 | | TC9163N |
| | IC401 | | TC9164N |
| | IC403 | | XRA4558-P |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C447, C448 | | CCSQCH102J50 |
| | C419, C420 | | CCSQCH221J50 |
| | C417, C418 | | CCSQCH681J50 |
| | C423, C424 | | CCSQSL101J50 |
| | C415, C416 | | CEAS100M50 |
| | C431, C432 | | CEAS101M16 |
| | C433, C434, C439, C440 | | CEAS2R2M50 |
| | C421, C422 | | CEAS470M25 |
| | C445, C446 | | CEAS4R7M50 |
| | C435-C438 | | CKSQYB103K50 |
| | C1400, C429, C430, C441, C444 | | CKSQYF103Z50 |
| | C427, C428 | | CQMA242J50 |
| | C425, C426 | | CQMA822J50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | All Resistors | | RS1/10S☐☐☐J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | | PIN JACK(6P) | AKB1121 |
| | CN8207 | PIN JACK(6P)(AWZ5416 ONLY) | AKB1129 |
| | | PIN JACK(4P)(AWZ5728 ONLY) | AKB1101 |
| | | PIN JACK(2P)(AWZ5728 ONLY) | AKB1151 |
| | | CABLE HOLDER(11P) | AKT1084 |
| | CN152 | 13P SOCKET | KP200IB13L |

## A/V FUNCTION ASSY (AWZ5417)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC452 | | TC9162N |
| | IC451 | | TC9163N |
| | IC453 | | XRA4558N-P |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C487, C488 | | CCSQCH102J50 |
| | C479, C480 | | CEAS2R2M50 |
| | C481, C482 | | CEAS470M25 |
| | C485, C486 | | CEAS4R7M50 |
| | C475-C478 | | CKSQYB103K50 |
| | C1450, C483, C484 | | CKSQYF103Z50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | All Resistors | | RS1/10S☐☐☐J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | | PIN JACK(4P) | AKB1101 |
| | | PIN JACK(4P) | AKB1124 |
| | CN2 | PLUG 3-P | KM250MA3L |
| | CN153 | 10P SOCKET | KP200IB10L |
| | CN11 | L-CONNECTOR(11P) | KPD11L |

## VIDEO FUNCTION ASSY (AWZ5418)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC502 | | LA7951 |
| | IC504 | | LA7952 |
| | IC1502 | | M66320FP |
| | IC501, IC503 | | NJM2233BLA |
| | IC505, IC509 | | NJM2234L |
| | IC1503 | | UPC78L05J |
| | Q505-Q507 | | 2SA1115 |
| | Q508 | | 2SC2412K |
| | Q509 | | 2SC2458 |
| | D501-D504 | | HSS104-02 |

### COILS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | L1501, L1503, L501-L504 | | LAU680J |
| | L509-L511 | | LAU680J |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C558, C559, C562 | | CCSQCH050C50 |
| | C1526 | | CCSQCH102J50 |
| | C1527 | | CCSQCH220J50 |
| | C1529 | | CCSQCH820J50 |
| | C1515 | | CEANP470M10 |
| | C1506 | | CEAS101M10 |
| | C507 | | CEAS101M16 |
| | C521 | | CEAS2R2M50 |
| | C1501, C1503, C1504, C1516-C1518 | | CEAS470M25 |
| | C1523, C1525, C501-C506, C509 | | CEAS470M25 |
| | C511, C513-C517, C519 | | CEAS470M25 |
| | C552, C553, C557 | | CEAS470M25 |
| | C561, C563 | | CEAS471M10 |
| | C560 | | CEAS471M6 |
| | C1522 | | CEAS4R7M50 |
| | C1505 | | CKSQYB102K50 |
| | C1502, C1507, C1519, C1521, C508 | | CKSQYF103Z50 |
| | C510, C518, C520, C554-C556 | | CKSQYF103Z50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R542, R548 | | RD1/2PM221J |
| | R541 | | RD1/2PM331J |
| | R1504 | | RD1/4PM680J |
| | Other Resistors | | RS1/10S☐☐☐J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | CN8111 | PIN JACK(2P) | AKB1118 |
| | | PHONO JACK 2-P | AKB1134 |
| | CN6 | 3P RCA PINJACK | AKB1143 |
| | CN3 | PLUG 3-P | KM250MA3L |
| | CN154 | 19P SOCKET | KP200IB19L |
| | CN199 | 9P SOCKET | KP200IB9L |

## VIDEO FUNCTION ASSY (AWZ5431)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC502 | | LA7951 |
| | IC504 | | LA7952 |
| | IC507 | | M50554-003SP |
| | IC1502 | | M66320FP |
| | IC506 | | MM1067XD |
| | IC501, IC503, IC508 | | NJM2233BLA |
| | IC505, IC509 | | NJM2234L |
| | IC1503 | | UPC78L05J |
| | Q505-Q507 | | 2SA1115 |
| | Q508 | | 2SC2412K |
| | Q503, Q504 | | 2SC2458 |
| | Q501, Q502, Q510 | | XDC124ES |
| | D508 | | 1SS108 |
| | D505-D507 | | 1SS352 |
| | D501-D504 | | HSS104-02 |

### COILS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | L506 | | LAU150J |
| | L507, L508 | | LAU270J |
| | L1501-L1503, L501-L504 | | LAU680J |
| | L509-L511 | | LAU680J |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | TC501 | | ACM-020 |
| | C558, C559, C562 | | CCSQCH050C50 |
| | C540, C546 | | CCSQCH101J50 |
| | C1526 | | CCSQCH102J50 |
| | C542, C544 | | CCSQCH150J50 |
| | C1528 | | CCSQCH151J50 |
| | C1527, C549, C551 | | CCSQCH220J50 |
| | C535 | | CCSQCH221J50 |
| | C543 | | CCSQCH330J50 |
| | C1529 | | CCSQCH331J50 |
| | C534 | | CCSQCH471J50 |
| | C532 | | CCSQCH561J50 |
| | C1503, C1515 | | CEANP470M10 |
| | C536 | | CEASR47M50 |
| | C526, C530, C531 | | CEAS010M50 |
| | C527, C547 | | CEAS100M50 |
| | C1506 | | CEAS101M10 |
| | C507 | | CEAS101M16 |
| | C521 | | CEAS2R2M50 |
| | C1501, C1504, C1511, C1513, C1514 | | CEAS470M25 |
| | C1516-C1518, C1523, C1525 | | CEAS470M25 |
| | C501-C506, C509, C511, C513-C517 | | CEAS470M25 |
| | C519, C538, C552, C553, C557 | | CEAS470M25 |
| | C561, C563 | | CEAS471M10 |
| | C560 | | CEAS471M6 |
| | C1524 | | CEJA100M16 |
| | C537 | | CEJA2R2M50 |
| | C1505, C545 | | CKSQYB102K50 |
| | C533 | | CKSQYB332K50 |
| | C1502, C1507, C1512, C1519, C1521 | | CKSQYF103Z50 |
| | C508, C510, C518, C520, C528, C539 | | CKSQYF103Z50 |
| | C548, C550, C554-C556 | | CKSQYF103Z50 |
| | C541 | | CKSQYF104Z50 |
| | C529 | | CKSQYF473Z50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R542, R548 | | RD1/2PM221J |
| | R541 | | RD1/2PM331J |
| | R1504 | | RD1/4PM680J |
| | R1531 | | RD1/8PM133J |
| | Other Resistors | | RS1/10S□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | CN8111 | PIN JACK(2P) | AKB1118 |
| | | PHONO JACK 2-P | AKB1134 |
| | CN6 | 3P RCA PINJACK | AKB1143 |
| | X502 | CRYSTAL RESONATOR (14.31818MHz) | ASS1056 |
| | X501 | CERAMIC RESONATOR(503kHz) | ASS1112 |
| | CN3 | PLUG 3-P | KM250MA3L |
| | CN154 | 16P SOCKET | KP200IB16L |
| | CN199 | 9P SOCKET | KP200IB9L |

## CONNECTION ASSY (AWZ5419 and AWZ5432)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC551 | | TC9176P |
| | IC1552, IC555 | | XRA4558-P |
| | D552-D554 | | HSS104-02 |
| | D551 | | RD5.1ESB2 |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C2554, C2555 | | CCSQCH101J50 |
| | C1553, C2551 | | CCSQCH102J50 |
| | C1564-C1567 | | CEAS100M50 |
| | C1551 | | CEAS102M16 |
| | C1552, C1556, C1557 | | CEAS470M25 |
| | C1554, C1555, C1562, C1563 | | CEAS4R7M50 |
| | C1558, C1559 | | CKSQYF103Z50 |
| | C2552, C2553 | | CKSQYF473Z50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R552 | | RD1/2PM181J |
| | R564, R565 | | RD1/2PM221J |
| | R1561 | | RFA1/4PS100J |
| | Other Resistors | | RS1/10S□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | CN114 | SOCKET(27P) | AKP1099 |
| | CN53 | 10P PLUG | KM200IB10 |
| | CN51 | 12P PLUG | KM200IB12 |
| | CN52 | 13P PLUG | KM200IB13 |
| | CN54 | 19P PLUG(AWZ5419) | KM200IB19 |
| | CN54 | 16P PLUG(AWZ5432) | KM200IB16 |
| | CN99 | 9P PLUG | KM200IB9 |

## TONE ASSY (AWZ5420 and AWZ5426)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC573 | | M5220P |
| | IC571 | | TC9162N |
| | IC572, IC574 | | XRA4558N-P |
| | Q577 | | 2SA1115 |
| | Q571-Q574 | | 2SC2458 |
| | D571-D574, D577-D580 | | HSS104-02 |
| | D575, D576 | | RD5.1ESB2 |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C591, C592 | | CCSQCH151J50 |
| | C573, C574 | | CEAS010M50 |
| | C585, C586, C589, C590 | | CEAS100M50 |
| | C599, C600 | | CEAS100M50 |
| | C571, C572, C587, C588 | | CEAS4R7M50 |
| | C593, C594 | | CEAS4R7M50 |
| | C577, C578, C595, C596 | | CEASR47M50 |
| | C575, C576 | | CFTXA154J50 |
| | C579, C580 | | CFTXA473J50 |
| | C605 | | CKDYF103Z50 |
| | C583, C584 | | CKPUYB151K50 |
| | C597, C598 | | CKSQYB103K50 |
| | C601 | | CKSQYB471K50 |
| | C581, C582 | | CQMA153J50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R627, R628 | | RD1/4PM221J |
| | R631 (AWZ5420 ONLY) | | RD1/4PM2R7J |
| | R1597 | | RS1/10S000J |
| | R622-R624 | | RS1/10S102J |
| | R575, R576, R629, R630 | | RS1/10S104J |
| | R605, R606 | | RS1/10S223J |
| | R601, R602 | | RS1/10S473J |
| | R603, R604 (AWZ5420) | | RS1/10S562J |
| | VR573 (10kΩ×2) | | ACS1029 |
| | VR571, VR572 (30kΩ×2) | | ACS1115 |
| | Other Resistors | | RD1/8PM□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | | CABLE HOLDER(10P) | AKT1083 |
| | CN55, CN56 | 15P PLUG | KM200IB15 |
| | CN13 | CONNECTOR(15P) | KPE15 |

## FL U-COM ASSY (AWZ5434 and AWZ5438)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC701 (AWZ5434) | | PDG118A |
| | IC701 (AWZ5438) | | PDG117B |
| | Q702, Q703, Q705-Q708, Q710 | | 2SC2458 |
| | Q711 (AWZ5434 ONLY) | | XDA124ES |
| | Q701, Q712, Q713 | | XDC124ES |
| | Q704 (AWZ5434 ONLY) | | XDC143ES |
| | D711-D714, D717-D720 (AWZ5434 ONLY) | | AEL1100 |
| | D735-D737, D739 | | AEL1100 |
| | D745-D752 (AWZ5434 ONLY) | | AEL1100 |
| | D754-D756 (AWZ5434 ONLY) | | AEL1100 |
| | D734 | | AEL1151 |
| | D723-D726, D753 (AWZ5434 ONLY) | | AEL1164 |
| | D701-D710, D715, D716 | | HSS104-02 |
| | D721, D722, D727, D728, D733 | | HSS104-02 |
| | D740-D743, D761-D763 | | HSS104-02 |
| | D764 (AWZ5434 ONLY) | | HSS104-02 |

### COIL

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | L701 | | LAU220K |

### SWITCHES

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | S701-S732 | | ASG1034 |
| | S733 | | ASX1015 |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C707 (47mF, 5.5V) | | ACH1246 |
| | C704, C706 | | CEAS010M50 |
| | C702 | | CEAS101M10 |
| | C708 | | CEAS470M50 |
| | C701 | | CEJA010M50 |
| | C705, C709 | | CKCYX473M25 |
| | C703 | | CKPUYF473Z16 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R743 | | RD1/4PM221J |
| | R725, R728, R731 (AWZ5434 ONLY) | | RD1/4PM271J |
| | Other Resistors | | RD1/8PM□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | V701 | FL TUBE | AAV1196 |
| | CN14 | SOCKET(27P) | AKP1100 |
| | CN20 | 18P SOCKET | AKP1106 |
| | X701 | CRYSTAL RESONATOR (8.00MHz) | ASS1015 |
| | | REMOTE RECEIVER UNIT | AXX1023 |

## SR & S. TERMINAL ASSY (AWQ1024 and AWQ1026)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC651, IC652 | | LA7951 |
| | IC653 | | NJM2234L |
| | IC654, IC655(AWQ1024 ONLY) | | NJM2234L |
| | Q656, Q657, Q660 | | 2SA1048 |
| | Q652, Q653, Q658 | | 2SA1115 |
| | Q651, Q654(AWQ1024 ONLY) | | 2SA1115 |
| | Q655, Q659 | | 2SC2458 |
| | Q1652 | | DTC143EK |
| | Q661, Q1651(AWQ1024 ONLY) | | XDC124ES |
| | D651-D653, D655-D657 | | HSS104-02 |
| | D1651(AWQ1024 ONLY) | | HSS104-02 |
| | D654 | | RD5.1ESB |

### COILS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | L651, L652, L655, L658 (AWQ1024 ONLY) | | LAU680K |
| | L653, L654, L656, L657, L659, L660 | | LAU680K |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C681, C682, C693 | | CCSQCH050C50 |
| | C680, C683(AWQ1024 ONLY) | | CCSQCH050C50 |
| | C1658 | | CCSQCH101J50 |
| | C688 | | CEANP470M10 |
| | C684, C686 | | CEAS010M50 |
| | C655, C656, C665, C671 | | CEAS100M50 |
| | C1657 | | CEAS101M10 |
| | C668, C669, C689 | | CEAS101M16 |
| | C1651, C663, C677, C678 | | CEAS470M25 |
| | C1654, C1655, C652, C654, C658 (AWQ1024 ONLY) | | CEAS470M25 |
| | C661, C676, C679(AWQ1024 ONLY) | | CEAS470M25 |
| | C692 | | CEAS470M25 |
| | C1653(AWQ1026 ONLY) | | CEAS470M25 |
| | C687, C694 | | CEAS471M10 |
| | C685 | | CEAS471M6 |
| | C1652 | | CEJA470M16 |
| | C1656 | | CKSQYB822K50 |
| | C666, C667, C673, C674 | | CKSQYF103Z50 |
| | C657, C662, C672, C675(AWQ1024 ONLY) | | CKSQYF103Z50 |
| | C672-C675, C690, C691 | | CKSQYF103Z50 |
| | C659, C660, C664 | | CKSQYF104Z25 |
| | C651, C653(AWQ1024 ONLY) | | CKSQYF104Z25 |
| | C670 | | CKSQYF104Z25 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R674(AWQ1024 ONLY) | | RD1/2PM221J |
| | R698 | | RD1/2PM221J |
| | R671(AWQ1024 ONLY) | | RD1/2PM331J |
| | R672, R673 | | RD1/2PM331J |
| | Other Resistors | | RS1/10S□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | CN655 | PIN JACK(1P) | AKB1168 |
| | CN651 | JACK | AKN1006 |
| | | JACK | AKN1020 |
| | CN653, CN654 | SOCKET | AKP1064 |
| | CN12 | CONNECTOR(14P) | KPE14 |
| | CN34 | CONNECTOR(6P) | KPE6 |

## GUI ASSY (AWQ1025)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC801 | | CXA1645M |
| | IC803 | | HM514256AP10 |
| | IC804 | | LH52B256N9LL |
| | IC809 | | MC74AC541M |
| | IC805 | | PDR008A |
| | IC808 | | SC78213GC |
| | IC807, IC812 | | TC74AC00F |
| | IC806, IC811 | | TC74HC573AF |
| | IC810 | | TC74HC74AF |
| | IC802 | | YGV606-F |
| | Q801-Q803 | | 2SC2712 |
| | Q804 | | 2SC3732 |
| | D801-D808 | | 1SS352 |

### COILS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | L801, L806, L809, L810 | | ATX1008 |
| | L818-L821 | | ATX1008 |
| | L822-L830 | | ATX1026 |
| | L811, L812, L814-L817 | | LCTA100J3225 |
| | L802-L805, L807, L808 | | LCTA1R0J3225 |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C853 (47mF, 5.5V) | | ACH1246 |
| | C809 | | CCSQCH020C50 |
| | C822, C823 | | CCSQCH120J50 |
| | C840, C843 | | CCSQCH150J50 |
| | C811 | | CCSQCH470J50 |
| | C806 | | CCSQCH560J50 |
| | C841 | | CEAS471M6 |
| | C807 | | CEJA100M16 |
| | C819, C826, C828, C833, C835 | | CEJA101M10 |
| | C847 | | CEJA101M10 |
| | C804, C812 | | CEJA470M16 |
| | C817 | | CEJA4R7M35 |
| | C810, C814-C816 | | CFTXA104J50 |
| | C854 | | CKSQYB102K50 |
| | C805, C813 | | CKSQYF103Z50 |
| | C808, C818, C820, C821 | | CKSQYF104Z50 |
| | C824, C825, C827, C831, C832 | | CKSQYF104Z50 |
| | C801-C803, C829, C830, C834 | | CKSQYF473Z50 |
| | C836-C839, C842, C844-C846 | | CKSQYF473Z50 |
| | C848-C852, C858 | | CKSQYF473Z50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | All Resistors | | RS1/10S□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | X801 | CRYSTAL RESONATOR | ASS1056 |
| | X802 | CRYSTAL RESONATOR | ASS1104 |
| | CN35 | CONNECTOR(5P) | KPE5 |
| | CN32 | CONNECTOR(6P) | KPE6 |
| | CN31 | CONNECTOR(9P) | KPE9 |

## PROLOGIC • SFC MODULE (AXQ1029)

### SEMICONDUCTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | IC2001 | | LA2785 |
| | IC2007 | | LC32464M-80 |
| | IC2008, IC2018 | | LC78835M |
| | IC2003-IC2006, IC2010, IC2011, IC2013 | | NJM4558M-D |
| | IC2017 | | NJM4558M-D |
| | IC2019 | | NJM78M05FAS |
| | IC2002 | | NJM78M09FAS |
| | IC2012 | | PDC017C |
| | IC2015 | | PDC018A |
| | IC2014 | | TC9162N |
| | Q2001 | | 2SA1162 |
| | Q2002 | | DTC124EK |
| | D2001, D2002, D2004 | | 1SS226 |

### COILS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | L2004, L2006, L2010, L2014 | | ATX1008 |
| | L2013, L2015 | | LCTAR22J3225 |
| | L2003, L2005 | | LTA102J |
| | L2011, L2012 | | LTA473J |

### CAPACITORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | C2168 | | CCSQCH040C50 |
| | C2084, C2085 | | CCSQCH080D50 |
| | C2036, C2108, C2113 | | CCSQCH101J50 |
| | C2164, C2167 | | CCSQCH150J50 |
| | C2163 | | CCSQCH470J50 |
| | C2080, C2081 | | CCSQCH471J50 |
| | C2082, C2083 | | CCSQCH680J50 |
| | C2018, C2021 | | CEANL3R3M50 |
| | C2014, C2016, C2023, C2025 | | CEANL4R7M50 |
| | C2122, C2126 | | CEANP101M16 |
| | C2072, C2073 | | CEAS010M50 |
| | C2047, C2048, C2053, C2058, C2064 | | CEAS100M50 |
| | C2102, C2104, C2106, C2130, C2135 | | CEAS100M50 |
| | C2060, C2066, C2153 | | CEAS101M10 |
| | C2105 | | CEAS220M16 |
| | C2068, C2069 | | CEAS220M25 |
| | C2037, C2166 | | CEAS221M10 |
| | C2003, C2008, C2123, C2127 | | CEAS221M16 |
| | C2051, C2052, C2054, C2067, C2103 | | CEAS2R2M50 |
| | C2076, C2077 | | CEAS330M16 |
| | C2039 | | CEAS331M16 |
| | C2029, C2056, C2092 | | CEAS470M10 |
| | C2112 | | CEAS470M25 |
| | C2138 | | CEAS471M10 |
| | C2004-C2007, C2009, C2010 | | CEJA100M16 |
| | C2032-C2034 | | CEJA100M16 |
| | C2013, C2015, C2024, C2026 | | CEJAR47M50 |
| | C2011, C2012, C2027, C2028 | | CFTXA104J50 |
| | C2019, C2020 | | CFTXA154J50 |
| | C2030 | | CFTXA474J50 |
| | C2017, C2022 | | CFTYA154J50 |
| | C2070, C2071, C2097 | | CKSQYB102K50 |
| | C2078, C2079, C2086, C2087 | | CKSQYB103K50 |
| | C2090, C2091, C2111 | | CKSQYB103K50 |
| | C2158, C2159, C2161, C2162 | | CKSQYB104K25 |
| | C2140-C2142 | | CKSQYB182K50 |
| | C2100 | | CKSQYB222K50 |
| | C2101 | | CKSQYB471K50 |
| | C2074, C2075, C2095, C2110, C2155 | | CKSQYB472K50 |
| | C2041, C2042, C2055, C2057, C2089 | | CKSQYB473K25 |
| | C2093, C2165, C2169-C2172 | | CKSQYB473K25 |
| | C2038, C2040, C2154 | | CKSQYB473K50 |
| | C2031, C2059, C2061, C2062, C2065 | | CKSQYF104Z50 |
| | C2096, C2107, C2109, C2129, C2134 | | CKSQYF104Z50 |
| | C2136 | | CKSQYF104Z50 |
| | C2001 | | CQMA223J50 |
| | C2002 | | CQMA473J50 |
| | C2035 | | CQMA681J50 |

### RESISTORS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | R2148 | | RD1/2PMFL4R7J |
| | Other Resistors | | RS1/10S□□□J |

### OTHERS

| Mark | No. | Description | Part No. |
|---|---|---|---|
| | X2002 | CERAMIC RESONATOR (4.19MHz) | ASS1018 |
| | X2001 | CRYSTAL RESONATOR (22.5792MHz) | ASS1114 |
| | CN2001 | 15P SOCKET | KP200IB15L |

# 7. ADJUSTMENTS

## 7.1 TUNER SECTION

1. Wiring ········ Connect the wires as shown in Fig. 7 – 1 (FM ANT. terminal : 75 Ω ).
2. Preset ········· Set the VR451 to center position.
3. When the SD model is used, set the band select switch to AM : 10kHz/FM : 100kHz.

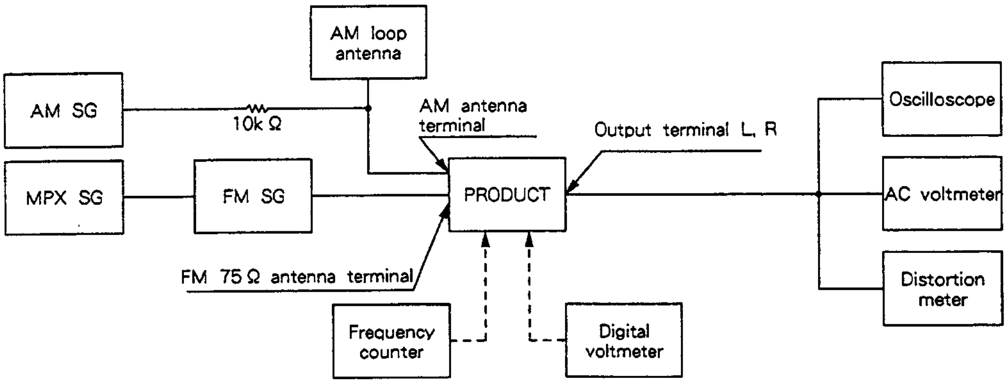

AM loop antenna
AM SG
10k Ω
AM antenna terminal
Output terminal L, R
Oscilloscope
MPX SG
FM SG
PRODUCT
AC voltmeter
FM 75 Ω antenna terminal
Distortion meter
Frequency counter
Digital voltmeter

Fig. 7 – 1 AM and FM adjustment wiring diagram

*Note : Stereo modulation Main 1kHz L+R ±68.25kHz*
*Pilot 19kHz±6.75kHz*

### FM Section

| Order | Item | SSG | | | Receiving Frequency | Adjustment | |
|---|---|---|---|---|---|---|---|
| | | Frequency | Modulation | Level | | Adjustment Location | Remarks |
| 1 | Increasing front end sensitivity | 98MHz | — | Weak input | 98MHz | L402,<br>L404,<br>T402 | Set the the voltage between terminal 43 and GND to maximum, and check that the practical sensitivity is as specified. |
| 2 | Center adjustment | 98MHz | — | 60dBμV | 98MHz | L431 | Adjust the voltage between terminals 45 and 46 to 0±50mV. |
| 3 | Adjusting VCO | — | OFF | 60dBμV | — | VR451 | Adjust the output of terminal 44 to 76.0kHz±1.0kHz. |
| 4 | Adjusting stereo distortion | 98MHz | L-ONLY<br>R-ONLY | 60dBμV | 98MHz | T402 | Minimize the distortion within 1/4 rotation of the core, and check conformity to the specification. |
| 5 | Adjusting lighting levels of TUNED and STEREO IND. | 98MHz | STEREO | 10dBμV<br>$\left({}^{+1\text{dB}}_{-2\text{dB}}\right)$ | 98MHz | VR432 | Adjust TUNED and STEREO IND. to start lighting. |

### AM Section

| Order | Item | SSG | | | Receiving Frequency | Adjustment | |
|---|---|---|---|---|---|---|---|
| | | Frequency | Modulation | Level | | Adjustment Location | Remarks |
| 1 | Adjusting lighting level of TUNED IND. | 1000kHz | — | — | 1000kHz | VR431 | Adjust the lighting level of TUNED IND. to 55dBμV/m±3dB. |

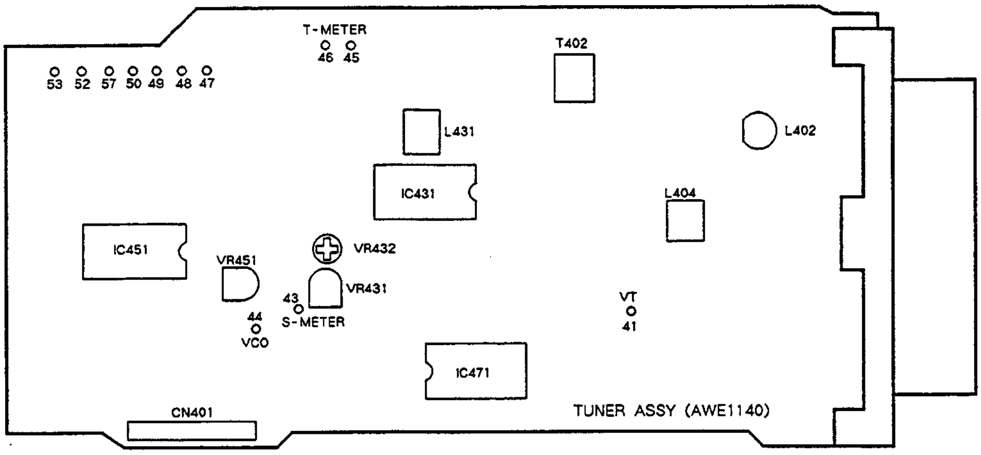

T-METER
46
45
T402
53
52
57
50
49
48
47
L431
L402
IC431
L404
IC451
VR432
VR451
VR431
43
44
S-METER
VCO
VT
41
IC471
CN401
TUNER ASSY (AWE1140)

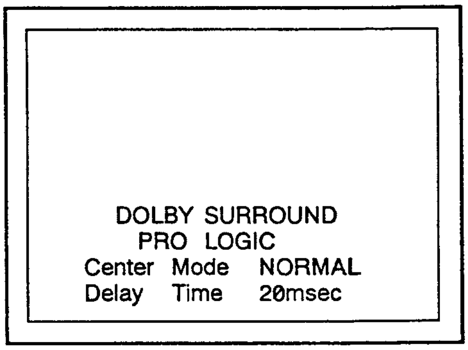
Fig. 7 – 2 Adjustment location of TUNER SECTION

## 7.2 VIDEO FUNCTION ASSY SECTION

- Connect the VIDEO OUT (TO MONITOR TV) terminal to a monitor TV.

1. Push the DOLBY PRO LOGIC button.
2. Adjust the TC501 to center the superimposed display (Fig. 7 - 3), leaving equal margin on both right and left of the TV screen.

*Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under one or more of the following patents: U.S. number 3, 959, 590: Canadian numbers 1, 004, 603 and 1, 037, 877. "Dolby", "Pro Logic", and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.*



DOLBY SURROUND
PRO LOGIC
Center Mode NORMAL
Delay Time 20msec

Fig. 7 – 3

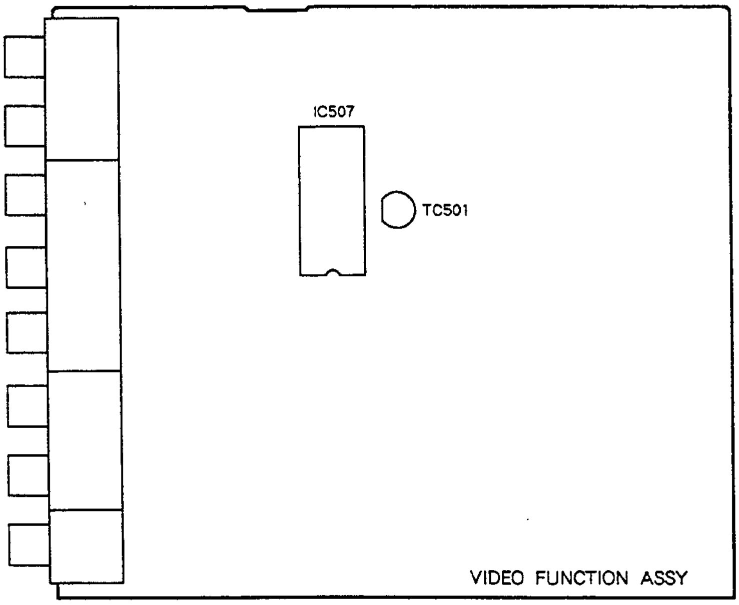
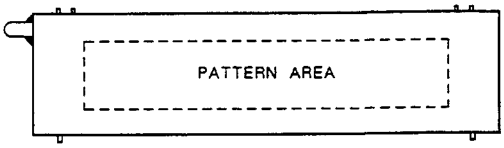

IC507
TC501
VIDEO FUNCTION ASSY

Fig. 7 – 4 Adjustment location of VIDEO FUNCTION SECTION

# 8. FL INFORMATION

## ■ AAV1196 (V701)

### PIN LOCATION


PATTERN AREA

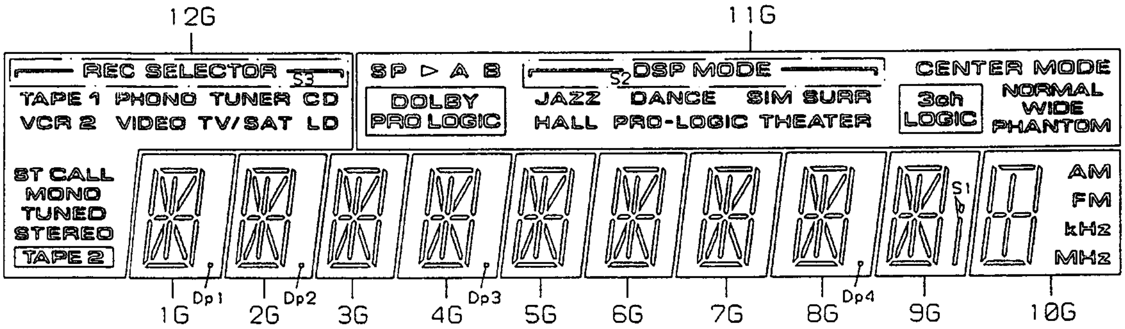
### PIN CONNECTION

| PIN NO. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CONNECTION | F1 | F1 | NP | NP | 1G | 2G | 3G | 4G | 5G | 6G | 7G | 8G | 9G | 10G | 11G | 12G | NX | NX | NX | NX | NX | NX | NX |

| PIN NO. | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CONNECTION | NX | NX | NX | P15 | P14 | P13 | P12 | P11 | P10 | P9 | P8 | P7 | P6 | P5 | P4 | P3 | P2 | P1 | NP | NP | F2 | F2 |

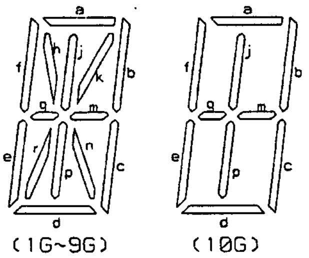
NOTE
1) F1, F2 --- Filament
2) NP ------ No pin
3) NX ------ No extend pin
4) DL ------ Datum Line
5) 1G~12G --- Grid

### GRID ASSIGNMENT


12G
11G
REC SELECTOR
S3
TAPE 1
PHONO
TUNER
CD
VCR 2
VIDEO
TV/SAT
LD
SP ▷ A B
DOLBY PRO LOGIC
S2
DSP MODE
JAZZ
DANCE
SIM SURR
HALL
PRO-LOGIC
THEATER
CENTER MODE
3ch LOGIC
NORMAL
WIDE
PHANTOM
ST CALL
MONO
TUNED
STEREO
TAPE 2
S1
AM
FM
kHz
MHz
1G
Dp1
2G
Dp2
3G
4G
Dp3
5G
6G
7G
8G
Dp4
9G
10G

### ANODE CONNECTION

| | 1G | 2G | 3G | 4G | 5G | 6G | 7G | 8G | 9G | 10G | 11G | 12G |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P 1 | a | a | a | a | a | a | a | a | a | a | PHANTOM | ST CALL |
| P 2 | j | j | j | j | j | j | j | j | j | j | DOLBY PRO LOGIC | MONO |
| P 3 | k | k | k | k | k | k | k | k | k | AM | WIDE | LD |
| P 4 | h | h | h | h | h | h | h | h | h | FM | NORMAL | TV/SAT |
| P 5 | b | b | b | b | b | b | b | b | b | b | 3ch LOGIC | VIDEO |
| P 6 | f | f | f | f | f | f | f | f | f | f | CENTER MODE | VCR 2 |
| P 7 | g | g | g | g | g | g | g | g | g | g | PRO-LOGIC THEATER | - |
| P 8 | m | m | m | m | m | m | m | m | m | m | HALL | CD |
| P 9 | c | c | c | c | c | c | c | c | c | c | SIM SURR | TUNER |
| P10 | e | e | e | e | e | e | e | e | e | e | DANCE | PHONO |
| P11 | n | n | n | n | n | n | n | n | n | kHz | JAZZ | TAPE 1 |
| P12 | r | r | r | r | r | r | r | r | r | MHz | SP ▷ | TUNED |
| P13 | p | p | p | p | p | p | p | p | p | p | A | STEREO |
| P14 | d | d | d | d | d | d | d | d | d | d | B | TAPE 2 |
| P15 | Dp1 | Dp2 | - | Dp3 | - | - | - | Dp4 | S1 | - | S2 | S3 |


a
h
j
k
f
b
g
m
e
r
n
p
c
d
(1G~9G)
a
j
f
b
g
m
e
p
c
d
(10G)

# 9. IC INFORMATION

- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

## ■ PDG118A (IC701)
## PDG117B (IC701)
## CONTROL MICROCOMPUTER

### ●Pin Function

Note : *1 : PDG118A , *2 : PDG117B

| No. | NAME | I/O | FUNCTION | ACTIV |
|---|---|---|---|---|
| 1 | MR RMC | I | Remote control signal input from sub-room side | H |
| 2 | RMC | I | Remote control signal input | H |
| 3 | *1: GUI-EN | I | Input for GUI U-COM (SC78213GC) ENABLE | L |
|  | *2: PE5 | O | Not used | — |
| 4 | *1: GUI-RESET | O | RESET output (SC78213GC, YGV606-F) | L |
|  | *2: PE6 | O | Not used | — |
| 5 | *1: BACK-UP | O | POWER ON/$\overline{\text{OFF}}$ | H |
|  | *2: PE7/T0 | O | Not used | — |
| 6 | POWER RY. | O | POWER Relay ON/OFF output | H |
| 7 | *1: GUI-CS | O | GUI U-COM (SC78213GC) CS output | L |
|  | *2: OSD-CS | O | OSD IC (M50554-003) CS output | L |
| 8 | *1: GUI-CLK | O | GUI U-COM (SC78213GC) CLOCK output | — |
|  | *2: OSD-CLOCK | O | OSD IC (M50554-003) CLOCK output | — |
| 9 | *1: GUI-DATA OUT | O | GUI U-COM (SC78213GC) DATA output | — |
|  | *2: OSD-DATA | O | OSD IC (M50554-003) DATA output | — |
| 10 | *1: GUI-DATA IN | I | GUI U-COM (SC78213GC) DATA input | — |
|  | *2: VIDEO DET | I | Input for VIDEO signal ON/ OFF detection | L |
| 11 | CLOCK | O | CLOCK output | — |
| 12 | DSP.CE | O | DSP IC CE | L |
| 13 | DATA | O | DATA output | — |
| 14 | SR. OUT | O | SR signal output | H |

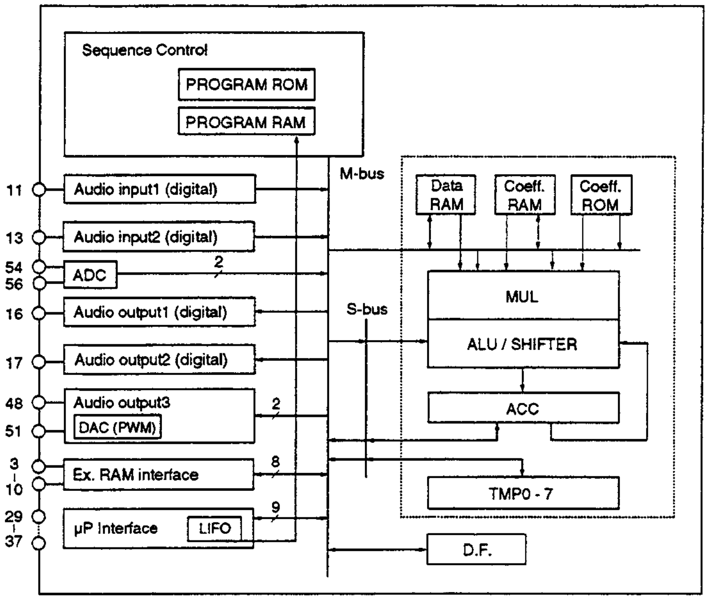
| No. | NAME | I/O | FUNCTION | ACTIV |
|---|---|---|---|---|
| 15 | KEY. IN. 1 | I | KEY matrix input 1 | — |
| 16 | KEY. IN. 2 | I | KEY matrix input 2 | — |
| 17 | KEY. IN. 3 | I | KEY matrix input 3 | — |
| 18 | JOG IN 1 | I | JOG input 1 | — |
| 19 | JOG IN 2 | I | JOG input 2 | — |
| 20 | ST1 | O | STROB output 1 | H |
| 21 | ST2 | O | STROB output 2 | H |
| 22 | M66320 LE | O | VIDEO system IC M66320FP Chip select | H |
| 23 | VOLUME IN | I | MASTER VOLUME input (A/D input) | — |
| 24 | FAN-T IN | I | FAN TEMPLE input (A/D input) | — |
| 25 | FAN-W IN | I | FAN WATTAGE input (A/D input) | — |
| 26 | TUNED | I | TUNER signal ON/OFF input | L |
| 27 | PLL-DATA | O | PLL IC (LM7001) DATA output | — |
| 28 | PLL-CLOCK | O | PLL IC (LM7001) CLOCK output | — |
| 29 | PLL-CE | O | PLL IC (LM7001) CE output | H |
| 30 | RESET | I | RESET input | L |
| 31 | EXTAL | O | Connect a ceramic resonator 8 MHz | — |
| 32 | XTAL | I |  |  |
| 33 | Vss | — | GND | — |
| 34 | TUNER MUTE | O | MUTE for TUNER | H |
| 35 | *1: SR MUTE | O | MUTE output of Remote control signal | H |
|  | *2: PD1/S1 | O | Not used | — |
| 36 | A. MUTE | O | Audio MUTE | H |

Note : *1 : PDG118A , *2 : PDG117B

| No. | NAME | I/O | FUNCTION | ACTIV |
|---|---|---|---|---|
| 37 | VH/VL | O | SPEAKER both A and B ON : H | H |
| 38 | VOL LED | O | LED for MASTER VOLUME | H |
| 39 | VOL UP | O | MASTER VOLUME control | — |
| 40 | VOL DOWN | O | UP DOWN STOP<br>UP H L L<br>DOWN L H L | |
| 41 | FAN ON/OFF | O | FAN ON/OFF | H |
| 42 | OSD MAIN/SUB | O | OSD MAIN/SUB switching (MAIN/SUB = L/H) | — |
| 43 | DIRECT | O | DIRECT ON/OFF | H |
| 44 | S1 / K.OUT 11 | O | FL Segment output 1 / KEY matrix output 11 | — |
| 45 | S2 / K.OUT 10 | O | FL Segment output 2 / KEY matrix output 10 | — |
| 46 | S3/ K.OUT 9 | O | FL Segment output 3 / KEY matrix output 9 | — |
| 47 | S4/ K.OUT 8 | O | FL Segment output 4 / KEY matrix output 8 | — |
| 48 | S5 / K.OUT 7 | O | FL Segment output 5 / KEY matrix output 7 | — |
| 49 | S6 / K.OUT 6 | O | FL Segment output 6 / KEY matrix output 6 | — |
| 50 | S7 / K.OUT 5 | O | FL Segment output 7 / KEY matrix output 5 | — |
| 51 | S8 / K.OUT 4 | O | FL Segment output 8 / KEY matrix output 4 | — |
| 52 | S9 / K.OUT 3 | O | FL Segment output 9 / KEY matrix output 3 | — |
| 53 | S10 / K.OUT 2 | O | FL Segment output 10/ KEY matrix output 2 | — |
| 54 | S11 / K.OUT 1 | O | FL Segment output 11 / KEY matrix output 1 | — |
| 55 | S12 | O | FL Segment output 12 | — |
| 56 | S13 | O | FL Segment output 13. | — |
| 57 | S14 | O | FL Segment output 14 | — |
| 58 | S15 | O | FL Segment output 15 | — |
| 59 | G1 | O | FL grit output 1 | — |
| 60 | G2 | O | FL grit output 2 | — |
| 61 | G3 | O | FL grit output 3 | — |
| 62 | G4 | O | FL grit output 4 | — |
| 63 | G5 | O | FL grit output 5 | — |
| 64 | G6 | O | FL Grit output 6 | — |
| 65 | G7 | O | FL Grit output 7 | — |
| 66 | G8 | O | FL Grit output 8 | — |
| 67 | G9 | O | FL Grit output 9 | — |
| 68 | G10 | O | FL Grit output 10 | — |
| 69 | G11 | O | FL Grit output 11 | — |
| 70 | G12 | O | FL Grit output 12 | — |
| 71 | Vfdp | — | FL – VF Load power supply input | — |
| 72 | Vdd | — | + 5 V power supply input | — |
| 73 | NC | — | + 5 V | — |
| 74 | SP-A | O | SPEAKER A ON/OFF | H |
| 75 | SP-B | O | SPEAKER B ON/OFF | H |
| 76 | C/R RY | O | CENTER/REAR Relay | H |
| 77 | MR RY | O | MULTI ROOM Relay | H |
| 78 | STEREO | I | TUNER STEREO input | H |
| 79 | WAKE UP | I | AC pulse input | — |
| 80 | *1: GUI MUKAI | I | GUI U-COM (SC78213GC) BUSY input | H |
| | *2: TE2 | O | Not used | — |

## ■ PDC017C (IC2012)
## DSP

### ●Block Diagram


Sequence Control
PROGRAM ROM
PROGRAM RAM
M-bus
S-bus
11
Audio input1 (digital)
13
Audio input2 (digital)
54
56
ADC
2
16
Audio output1 (digital)
17
Audio output2 (digital)
48
51
Audio output3
DAC (PWM)
2
3
10
Ex. RAM interface
8
29
37
μP Interface
LIFO
9
Data RAM
Coeff. RAM
Coeff. ROM
MUL
ALU / SHIFTER
ACC
TMP0 - 7
D.F.

### ●Pin Function

(E) : External memory I/F, (A) : Audio I/F, (M) : Microprocessor I/F

| No. | NAME | I/O | FUNCTION |
|---|---|---|---|
| 1 | $\overline{DWRT}$ (E) | O | External memory write signal output |
| 2 | $\overline{CE}$/$\overline{CS}$ (E) | O | External memory enable/select signal output (SRAM, PSRAM, ROM) |
| 3 | D7 (E) | I/O | Data I/O<br>(One DRAM:D3 to D0, others:D7 to D0) |
| 4 | D6 (E) | | |
| 5 | D5 (E) | | |
| 6 | D4 (E) | | |
| 7 | D3 (E) | | |
| 8 | D2 (E) | | |
| 9 | D1 (E) | | |
| 10 | D0 (E) | | |
| 11 | ASI1 (A) | I | Audio input |
| 12 | BCK1 (A) | I | ASI1 bit clock input |
| 13 | ASI2 (A) | I | Audio input |
| 14 | BCK2 (A) | I | ASI2 bit clock input |
| 15 | LRCKO (A) | O | fs output (LRCKI through output or 1/512 or 1/384 divided output of OSC1) |
| 16 | ASO1 (A) | O | Audio output |
| 17 | ASO2 (A) | | |
| 18 | AOWCK (A) | O | 2 fs output (1/32 divided output of BCK1 or 1/256 or 1/192 divided output of OSC1) |
| 19 | LRCKI (A) | I | fs input (Lch and Rch switching signal) |
| 20 | $V_{DD}$ | — | Digital block $V_{DD}$ (Connected to + 5V.) |
| 21 | OSC1 | I | Connected to crystal Resonator. |
| 22 | OSC2 | O | Connected to crystal Resonator. |
| 23 | $V_{SS}$ | — | Digital block $V_{SS}$ (Connected to GND.) |
| 24 | BCKDV | O | 32 fs output (1/2 divided output of BCK1 or 1/16 or 1/12 divided output of OSC1) |
| 25 | BCKO | O | 64 fs output (BCK1 through output or 1/8 or 1/6 divided output of OSC1) |
| 26 | FS1280 | O | 128 fs output (1/4 or 1/3 divided output of SCKI or 1/4 or 1/3 divided output of OSC1) |
| 27 | SCKDV | O | 192 fs or 256 fs output (1/2 divided output of SCKI or 1/2 divided output of OSC1) |
| 28 | SCKO | O | 384 fs or 512 fs output (SCKI through output or OSC1 through output) |
| 29 | SO (M) | O | Serial data output to control microprocessor (8-bit serial) |
| 30 | $\overline{SOAK}$ (M) | O | Output that indicates serial output is in function. |
| 31 | $\overline{SIAK}$ (M) | O | Output that indicates serial input is in function. |
| 32 | SOCK (M) | I | SO transfer clock input |
| 33 | $\overline{SORQ}$ (M) | I | Serial output request signal input |

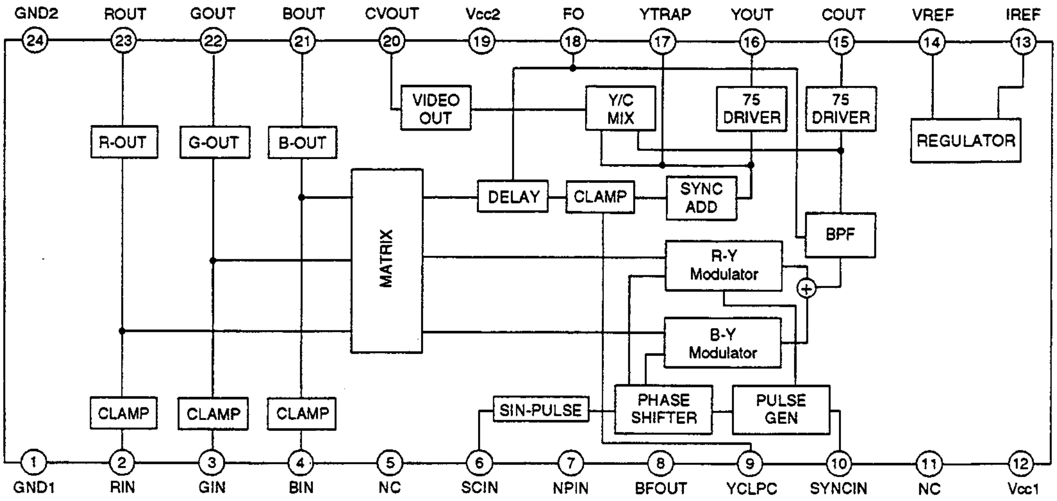
(E) : External memory I/F, (A) : Audio I/F, (M) : Microprocessor I/F

| No. | NAME | I/O | FUNCTION |
|---|---|---|---|
| 34 | $\overline{\text{SRDY}}$ (M) | I | Ready signal input that indicates serial data input from control microprocessor is completed. |
| 35 | SICK (M) | I | SI transfer clock input |
| 36 | SI (M) | I | Serial data input from control microprocessor (8-bit serial) |
| 37 | $\overline{\text{SIRQ}}$ (M) | I | Serial input request signal input |
| 38 | SCKI | I | 384 fs or 512 fs input |
| 39 | $\overline{\text{SELC}}$ | I | System clock switching (0: External (SCKI), 1: Internal) |
| 40 | TEST6 | O | Test (Normally no connection) |
| 41 | $V_{DD}$ | — | Digital block $V_{DD}$ (Connected to +5V.) |
| 42 | TEST1 | I | Test (Normally connected to GND.) |
| 43 | TEST2 | | |
| 44 | TEST3 | | |
| 45 | TEST4 | | |
| 46 | TEST5 | | |
| 47 | DAL$V_{SS}$ | — | D/A Vss (Lch). Connected to GND. |
| 48 | DAOL (A) | O | D/A output (Lch) |
| 49 | DAL$V_{DD}$ | — | D/A $V_{DD}$ (Lch). Connected to +5V. |
| 50 | DAR$V_{SS}$ | — | D/A Vss (Rch). Connected to GND. |
| 51 | DAOR (A) | O | D/A output (Rch) |
| 52 | DAR$V_{DD}$ | — | D/A $V_{DD}$ (Rch). Connected to +5V. |
| 53 | DZLOUT (A) | O | A/D dither output (Lch) |
| 54 | ADL2 (A) | O | A/D output (Lch) |
| 55 | ADL$V_{SS}$ | — | A/D Vss (Lch). Connected to GND. |
| 56 | ADL1 (A) | I | A/D input (Lch) |
| 57 | ADL$V_{DD}$ | — | A/D $V_{DD}$ (Lch). Connected to +5V. |
| 58 | ADL3 (A) | O | A/D output (Lch) |
| 59 | DZROUT (A) | O | A/D dither output (Rch) |
| 60 | ADR2 (A) | O | A/D output (Rch) |
| 61 | ADR$V_{SS}$ | O | A/D Vss (Rch). Connected to GND. |
| 62 | ADR1 (A) | I | A/D input (Rch) |
| 63 | ADR$V_{DD}$ | — | A/D $V_{DD}$ (Rch). Connected to +5V. |
| 64 | ADR3 (A) | O | A/D output (Rch) |
| 65 | $\overline{\text{SACK1}}$ | I | Frequency division switching for creating 128 fs (0: 1/3, 1: 1/4) |

| No. | NAME | I/O | FUNCTION |
|---|---|---|---|
| 66 | $\overline{\text{SACK2}}$ | I | L/R clock and bit clock switching (0:External, 1:Internal) |
| 67 | $\overline{\text{SACK3}}$ | I | Input system clock frequency switching (0:768 fs, 1:384 fs, or 512 fs) |
| 68 | $\overline{\text{RES}}$ | I | Reset |
| 69 | Vss | — | Digital block Vss (Connected to GND.) |
| 70 | $V_{DD}$ | — | Digital block $V_{DD}$ (Connected to +5V.) |
| 71 | P0 | I/O | General-purpose port (with pull-up) |
| 72 | P1 | | |
| 73 | P2 | | |
| 74 | P3 | | |
| 75 | P4 | | |
| 76 | P5 | | |
| 77 | P6 | | |
| 78 | P7 | | |
| 79 | A0 (E) | O | Address output (DRAM access: A9 to A0, others: A16 to A0) |
| 80 | A1 (E) | | |
| 81 | A2 (E) | | |
| 82 | A3 (E) | | |
| 83 | A4 (E) | | |
| 84 | A5 (E) | | |
| 85 | A6 (E) | | |
| 86 | A7 (E) | | |
| 87 | A8 (E) | | |
| 88 | A9 (E) | | |
| 89 | $V_{DD}$ | — | Digital block $V_{DD}$ (Connected to +5V.) |
| 90 | Vss | — | Digital block Vss (Connected to GND.) |
| 91 | A10 (E) | O | Address output (DRAM access: A9 to A0, others: A16 to A0) |
| 92 | A11 (E) | | |
| 93 | A12 (E) | | |
| 94 | A13 (E) | | |
| 95 | A14 (E) | | |
| 96 | A15 (E) | | |
| 97 | A16 (E) | | |
| 98 | $\overline{\text{RAS}}$ (E) | O | $\overline{\text{RAS}}$ signal output during DRAM access |
| 99 | $\overline{\text{CAS}}$ (E) | O | $\overline{\text{CAS}}$ signal output during DRAM access |
| 100 | $\overline{\text{DREAD}}$(E) | O | External memory read signal output |

## ■ CXA1645M (IC801)
## RGB TO COMPOSITE-VIDEO ENCODER

### ●Block Diagram


GND2
ROUT
GOUT
BOUT
CVOUT
Vcc2
FO
YTRAP
YOUT
COUT
VREF
IREF
24
23
22
21
20
19
18
17
16
15
14
13
VIDEO OUT
Y/C MIX
75 DRIVER
75 DRIVER
REGULATOR
R-OUT
G-OUT
B-OUT
MATRIX
DELAY
CLAMP
SYNC ADD
BPF
R-Y Modulator
B-Y Modulator
SIN-PULSE
PHASE SHIFTER
PULSE GEN
CLAMP
CLAMP
CLAMP
1
2
3
4
5
6
7
8
9
10
11
12
GND1
RIN
GIN
BIN
NC
SCIN
NPIN
BFOUT
YCLPC
SYNCIN
NC
Vcc1

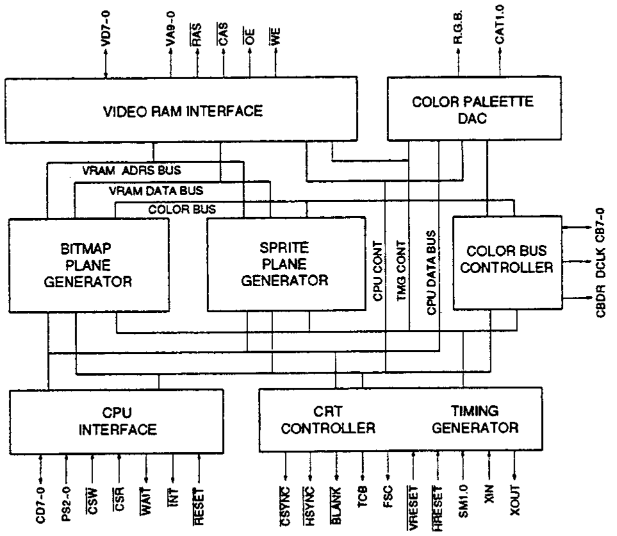
### ●Pin Function

| No. | NAME | FUNCTION |
|---|---|---|
| 1 | GND1 | GND for circuits other than RGB output, composite video output, and Y/C output circuits. |
| 2 | RIN | Analog RGB signal input |
| 3 | GIN | |
| 4 | BIN | |
| 5 | NC | No connection |
| 6 | SCIN | Sub-carrier input.<br>Receives sign wave or pulse of 0.4 Vp-p to 5.0 Vp-p input level. |
| 7 | NPIN | NTSC and PAL switching.<br>NTSC : Vcc<br>PAL : GND |
| 8 | BFOUT | BF pulse monitor output |
| 9 | YCLPC | Y signal clamping time constant.<br>Connects 0.1 µF capacitor between GNDs. |
| 10 | SYNCIN | Composite SYNC signal input.<br>TTL level input.<br>L (≦ 0.8 V) : SYNC period<br>H (≧ 2.0 V) |
| 11 | NC | No connection |
| 12 | Vcc1 | Power supply for circuits other than RGB output, composite Video output, and Y/C output circuits. |

| No. | NAME | FUNCTION |
|---|---|---|
| 13 | IREF | Decides internal reference current.<br>Connects 47 kΩ resister between GNDs. |
| 14 | VREF | Internal reference voltage |
| 15 | COUT | C-signal output |
| 16 | YOUT | Y-signal output |
| 17 | YTRAP | Reduces the cross-color caused by sub-carrier frequency component contained in the Y signal. |
| 18 | FO | Adjusts internal filter fo.<br>Connects the following resisters between GNDs according to NTSC/PAL modes.<br>NTSC : 20 kΩ ( ± 1%)<br>PAL : 16 kΩ ( ± 1%) |
| 19 | Vcc2 | Power supply for RGB output, composite video output, and Y/C output circuits. |
| 20 | CVOUT | Composite video signal output |
| 21 | BOUT | Analog RGB signal output |
| 22 | GOUT | |
| 23 | ROUT | |
| 24 | GND2 | GND for RGB output, composite video output, and Y/C output circuits. |

## ■ YGV606-F (IC802)
## VIDEO DISPLAY PROCESSOR

### ●Block Diagram


VD7-0
VA9-0
RAS
CAS
OE
WE
R.G.B.
CAT1,0
VIDEO RAM INTERFACE
COLOR PALEETTE DAC
VRAM ADRS BUS
VRAM DATA BUS
COLOR BUS
BITMAP PLANE GENERATOR
SPRITE PLANE GENERATOR
CPU CONT
TMG CONT
CPU DATA BUS
COLOR BUS CONTROLLER
CBDR
DCLK
CB7-0
CPU INTERFACE
CRT CONTROLLER
TIMING GENERATOR
CD7-0
PS2-0
CSW
CSR
WAIT
INT
RESET
CSYNC
HSYNC
BLANK
TCB
FSC
VRESET
HRESET
SM1,0
XIN
XOUT

### ●Pin Function

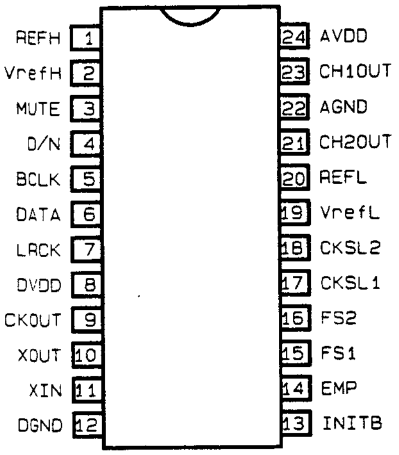
| NAME | FUNCTION |
|---|---|
| CD7-0 | CPU 8-bit bi-directional data bus |
| PS2-0 | I/O port number specification input. Selects P6 to P0 of AVDP. |
| $\overline{\text{CSW}}$ | Strobe signal input for writing data from CPU to ADVP |
| $\overline{\text{CSR}}$ | Srtobe signal input for reading data from CPU to ADVP |
| $\overline{\text{WAIT}}$ | Wait signal to CPU |
| $\overline{\text{INT}}$ | Interruption request signal output to CPU |
| $\overline{\text{RESET}}$ | Power ON reset signal. Initializes AVDP at low level. |
| VD7-0 | VRAM data bus |
| VA9-0 | VRAM address bus |
| $\overline{\text{RAS}}$ | DRAM row address strobe for VRAM |
| $\overline{\text{CAS}}$ | DRAM column address atrobe signal for VRAM |
| $\overline{\text{OE}}$ | DRAM data output enable signal for VRAM |
| $\overline{\text{WE}}$ | DRAM write enable signal for VRAM |
| R, G, B | Liner RGB output |
| CAT1,0 | Color code attribute timing output. Generated according to the color pallet AT1 and AT0, and their color code liner RGB output timing. |
| CB7-0 | Display color code input/output with AVDP (2-dot faster than liner RGB) |
| DCLK | Dot clock output. The input/outputs of CB7 to CB0 are synchronized with this clock. |

| NAME | FUNCTION |
|---|---|
| CBDR | Indicates the input/output status of CB7 to CB0.<br>CBDR is "L" : CB7 to CB0 are input.<br>CBDR is "H" : CB7 to CB0 are output. |
| $\overline{\text{CSYNC}}$ | Composite SYNC signal output or vertical SYNC signal output |
| $\overline{\text{HSYNC}}$ | Horizontal SYNC signal output. Equalizing pulse is not inserted. |
| $\overline{\text{BLANK}}$ | Blanking period output |
| FSC | Sub-carrier clock output for NTSC video encoder. Valid only in NTSC mode. |
| $\overline{\text{VRESET}}$ | Vertical timing reset input |
| $\overline{\text{HRESET}}$ | Horizontal timing reset. AVDP horizontal timing is set to the horizontal SYNC start position during falling of this signal. Additionally, the dot clock phase is defined against the main clock. |
| TCB | Color burst insertion timing signal output |
| SM | Scan mode select input<br>SM : Scan mode<br>High : NTSC<br>Low : PAL |
| XIN ,<br>XOUT | Connected to crystal Resonator. External oscillation clock is input to XIN. |
| AVDD,ADss | RGB analog power supply input |
| VDD,Vss | Digital power supply input |
| TSTP | Internal circuit test input. Normally "H" or no connection. |

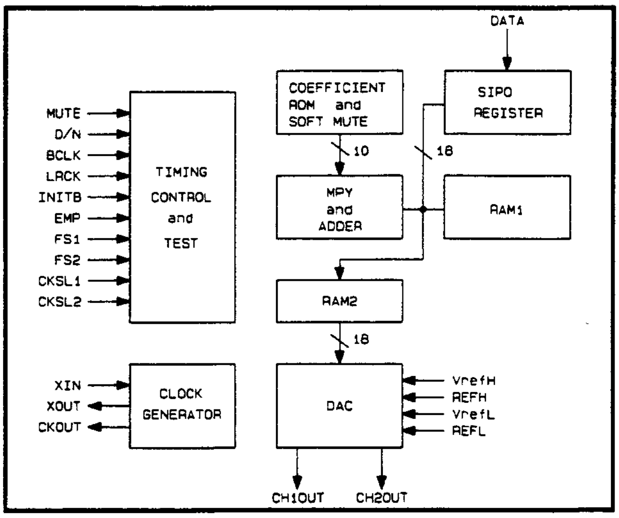
## ■ LC7883M (IC2008, IC2018 : PROLOGIC•SFC MODULE)

**•18-bit Digital Filter and 18-bit D/A Converter, CMOS IC**

- Pin Assignment (Top View)


REFH 1
VrefH 2
MUTE 3
D/N 4
BCLK 5
DATA 6
LRCK 7
DVDD 8
CKOUT 9
XOUT 10
XIN 11
DGND 12
24 AVDD
23 CH1OUT
22 AGND
21 CH2OUT
20 REFL
19 VrefL
18 CKSL2
17 CKSL1
16 FS2
15 FS1
14 EMP
13 INITB

- Block Diagram


DATA
MUTE
D/N
BCLK
LRCK
INITB
EMP
FS1
FS2
CKSL1
CKSL2
TIMING CONTROL and TEST
COEFFICIENT ROM and SOFT MUTE
SIPO REGISTER
10
18
MPY and ADDER
RAM1
RAM2
18
XIN
XOUT
CKOUT
CLOCK GENERATOR
DAC
VrefH
REFH
VrefL
REFL
CH1OUT
CH2OUT

- Pin Function

| No. | Name | Description |
|---|---|---|
| 1 | REFH | Reference Voltage “H” Terminal<br>Usually connected to AGND via capacitor. |
| 2 | Vref H | Reference Voltage “H” Input Terminal |
| 3 | MUTE | Mute Signal Input Terminal<br>“H”: Soft Mute ON |
| 4 | D/N | Standard/Double Speed Mode Changeover Terminal<br>“H”: Double speed; “L”: Standard speed |
| 5 | BCLK | Bit Clock Input Terminal |
| 6 | DATA | Digital Audio Data Input Terminal<br>Inputs with 2’S complement, MSB first |
| 7 | LRCK | LR Clock Input Terminal<br>Inputs CH1 with “H” and CH2 with “L”. |
| 8 | DVDD | Digital System Power Terminal |
| 9 | CKOUT | Clock Output Terminal<br>at 392 fs: 196 fs clock<br>excluding 392 fs: XIN frequency clock |
| 10 | XOUT | Crystal Oscillator Output Terminal<br>(System Clock Output Terminal) |
| 11 | XIN | Crystal Oscillator Input Terminal<br>(System Clock Input Terminal) |
| 12 | DGND | Digital System Ground Terminal |
| 13 | INITB | Initializing Signal Input Terminal<br>With “L”, initializing is performed. |

| No. | Name | Description |
|---|---|---|
| 14 | EMP | De-emphasis Filter ON/OFF Changeover Terminal H”: ON, “L”: OFF |
| 15 | FS1 | De-emphasis Filter 32kHz/44.1kHz/48kHz Mode Selection Terminal |
| 16 | FS2 | |

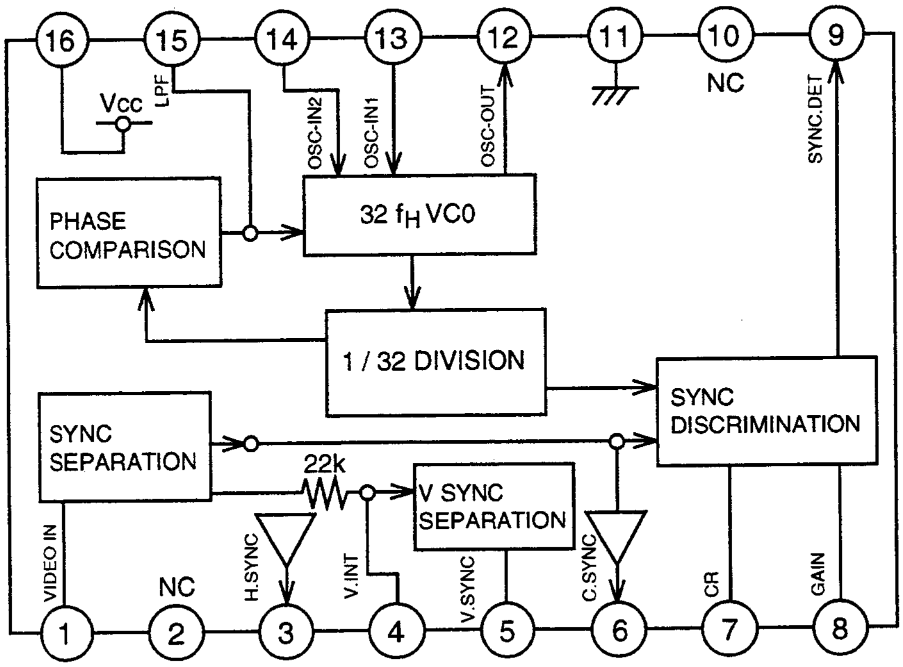
| FS1 | L | H | H | L |
|---|---|---|---|---|
| FS2 | L | L | H | H |
| fs | 44.1kHz | | 32kHz | 48kHz |

| No. | Name | Description |
|---|---|---|
| 17 | CKSL1 | System Clock Selection Terminal |
| 18 | CKSL2 | |

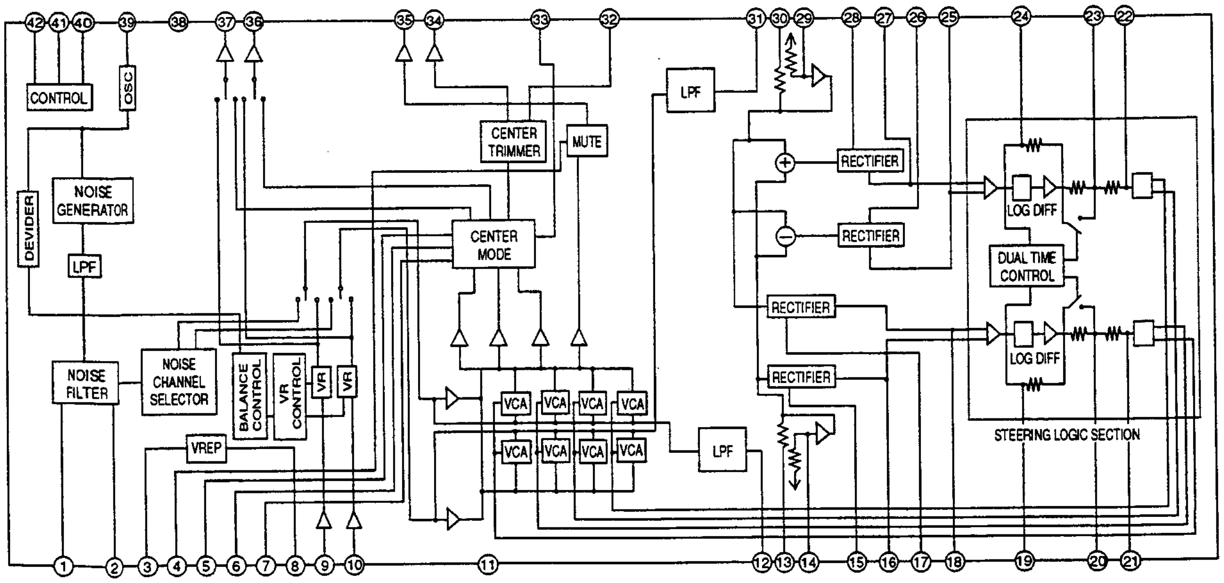
| CKSL1 | CKSL2 | System Clock |
|---|---|---|
| L | L | 384 fs |
| L | H | 392 fs |
| H | L | 448 fs |
| H | H | 512 fs |

| No. | Name | Description |
|---|---|---|
| 19 | VrefL | Reference Voltage “L” Input Terminal |
| 20 | REFL | Reference Voltage “L” Terminal<br>Normally connected to AGND via capacitor. |
| 21 | CH2OUT | CH2 Analog Output Terminal |
| 22 | AGND | Analog System Ground Terminal |
| 23 | CH1OUT | CH1 Analog Output Terminal |
| 24 | AVDD | Analog System Power Terminal |

## ■MM1067XD (IC506)


16
15
14
13
12
11
10
9
Vcc
LPF
OSC-IN2
OSC-IN1
OSC-OUT
NC
SYNC.DET
PHASE COMPARISON
32 fH VC0
1 / 32 DIVISION
SYNC DISCRIMINATION
SYNC SEPARATION
22k
V SYNC SEPARATION
VIDEO IN
NC
H.SYNC
V.INT
V.SYNC
C.SYNC
CR
GAIN
1
2
3
4
5
6
7
8

## ■LA2785 (IC2001)


42
41
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36
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28
27
26
25
24
23
22
CONTROL
OSC
DEVIDER
NOISE GENERATOR
LPF
NOISE FILTER
NOISE CHANNEL SELECTOR
BALANCE CONTROL
VR CONTROL
VR
VR
VREP
CENTER TRIMMER
MUTE
CENTER MODE
VCA
VCA
VCA
VCA
VCA
VCA
VCA
VCA
LPF
LPF
RECTIFIER
RECTIFIER
RECTIFIER
RECTIFIER
LOG DIFF
DUAL TIME CONTROL
LOG DIFF
STEERING LOGIC SECTION
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21

# 10. REMOTE CONTROL UNIT

## 10.1 FOR CU-VSX084 (AXD1385)

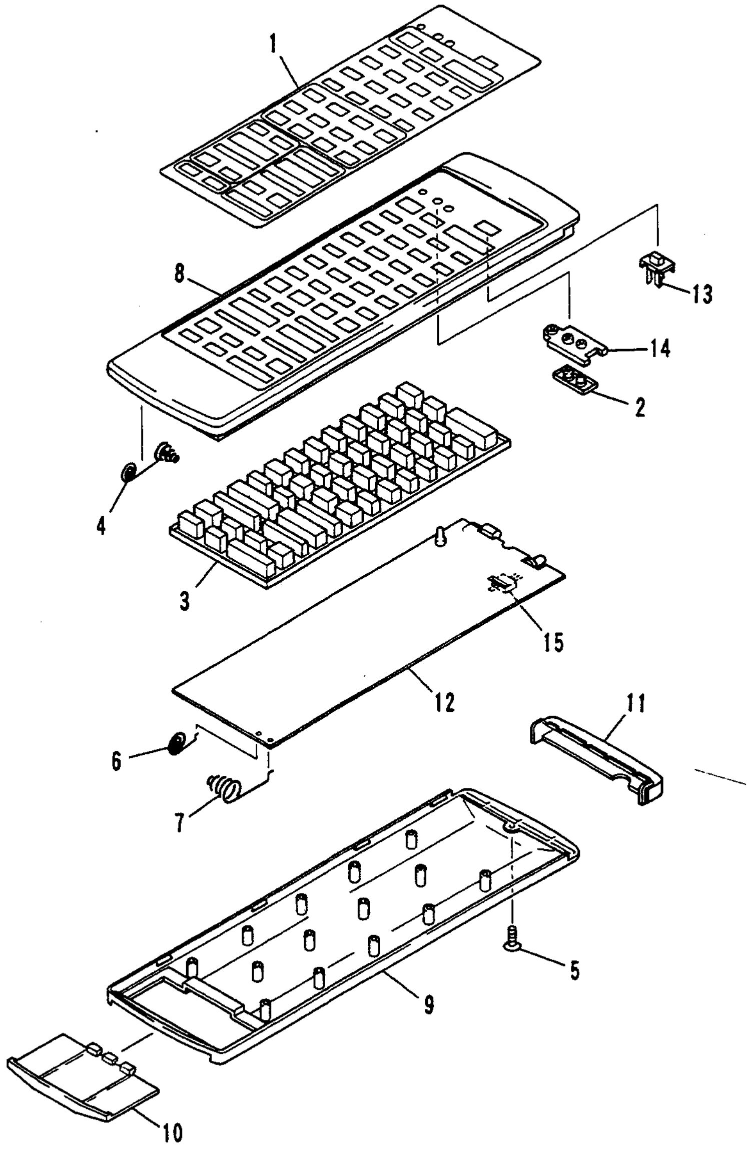
### ■ EXPLODED VIEW AND PARTS LIST

*NOTES:*

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

**Parts List**

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | 1 | PLATE | AZA1984 |
| | 2 | RUBBER SHEET (A) (S102) | AZA1985 |
| | 3 | RUBBER SHEET (B) (S103) | AZA1986 |
| | 4 | TERMINAL | AZB1334 |
| | 5 | SCREW | AZB1335 |
| | 6 | TERMINAL (A) | AZB1379 |
| | 7 | TERMINAL (B) | AZB1380 |
| | 8 | CASE (A) | AZN2254 |
| | 9 | CASE (B) | AZN2255 |
| | 10 | BATTERY COVER | AZN2256 |
| | 11 | FILTER | AZN2257 |
| NSP | 12 | P. C. BOARD | AZN2258 |
| | 13 | KNOB (VIDEO/AUDIO) | AZN2259 |
| | 14 | FRAME | AZN2260 |
| | 15 | SLIDE SW (S101) | AZS1134 |



### ■ PCB PARTS LIST

*NOTES:*

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

*Ex.1 When there are 2 effective digits(any digit apart from 0), such as 560 ohm and 47k ohm(tolerance is shown by J=5%, and K=10%).*

*560 Ω → $56 \times 10^1$ → 561 ······ RD1/8PM$\boxed{5}\boxed{6}\boxed{1}$J*
*47k Ω → $47 \times 10^3$ → 473 ······ RD1/4PS$\boxed{4}\boxed{7}\boxed{3}$J*
*0.5 Ω → 0R5 ······ RN2H$\boxed{0}\boxed{R}\boxed{5}$K*
*1 Ω → 010 ······ RS1P$\boxed{0}\boxed{1}\boxed{0}$K*

*Ex.2 When there are 3 effective digits(such as in high precision metal film resistors).*

*5.62k Ω → $562 \times 10^1$ → 5621 ······ RN1/4PC$\boxed{5}\boxed{6}\boxed{2}\boxed{1}$F*

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| SEMICONDUCTORS | | | |
| | IC1 | μ−COM | AZC1841 |
| | IC2 | IC | PST9121N |
| | Q1 | CHIP TRANSISTOR | 2SC3265 |
| | D1 | LED | SE303A−C |
| | D2 | CHIP DIODE | RLS73 |
| | D3 | DIODE | SPS−503C−3 |
| | D4, 5 | CHIP DIODE | RLS73 |
| | D6 | LED | SLC−22VR |
| CAPACITORS | | | |
| | C1 | ELECT. CAPACITOR | CEAS221M25 |
| | C2 | ELECT. CAPACITOR | CEAS101M10 |
| | C3 | ELECT. CAPACITOR | CEAS0R1M50 |
| | C4, 5 | CERAMIC CAPACITOR | CCDSL330J50 |
| | C6 | ELECT. CAPACITOR | CEAS101M10 |
| | C7 | CERAMIC CAPACITOR | CCDSL101J50 |
| | C8 | ELECT. CAPACITOR | CEAS0R1M50 |
| RESISTORS | | | |
| | R1 | CARBON FILM RESISTOR | RD1/4PM020J |
| | | Other resistors | RD1/8PM□□□J |
| OTHERS | | | |
| | X1 | RESONATOR | FCR4.0MC3 |

## ■ SCHEMATIC DIAGRAM

NOTE

▭ : Indicates a chip resistor.

▮ : Indicates a chip capacitor.

: Indicates a chip transistor.

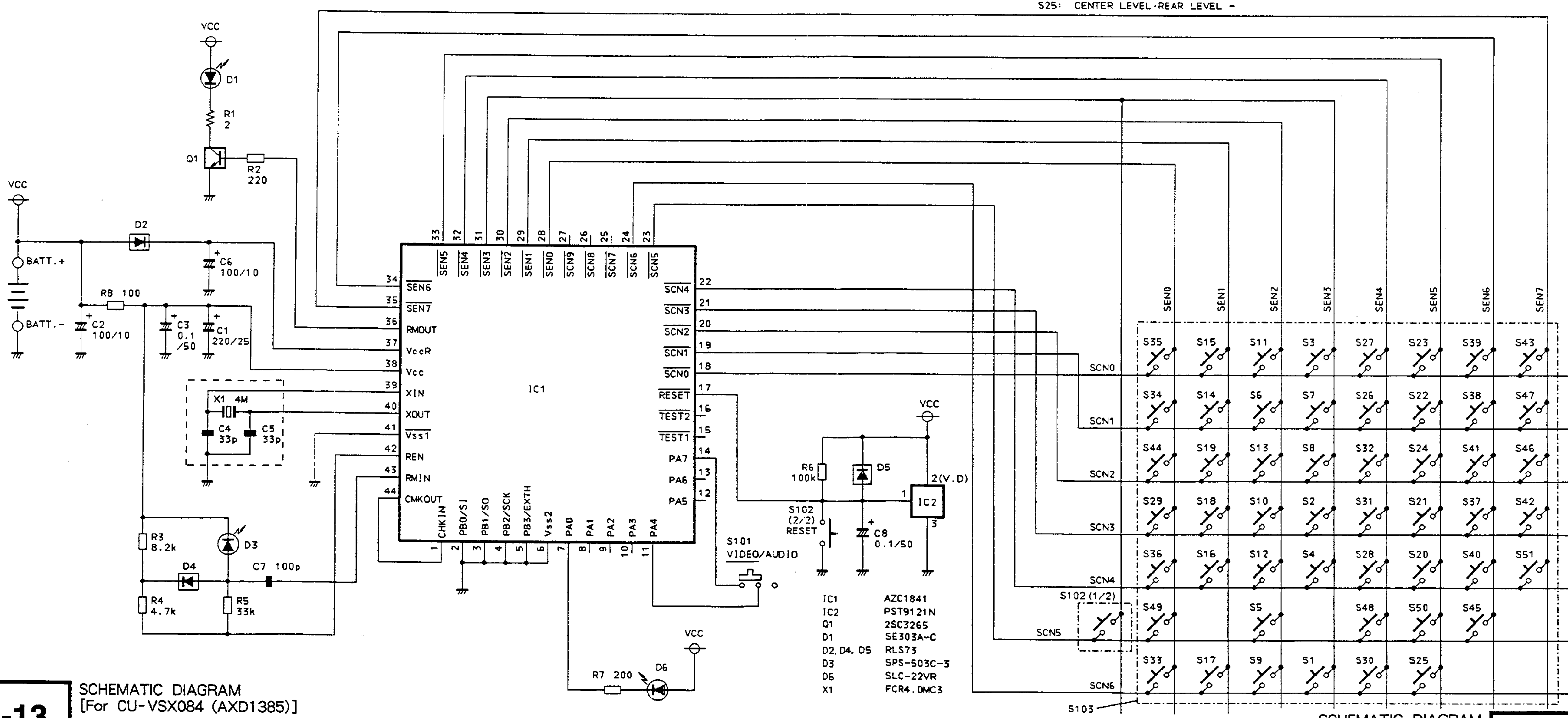
: Indicates a chip diode.

### NOTE FOR SCHEMATIC DIAGRAMS (Type 2A)

1. **When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".**
2. **Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.**
3. **RESISTORS:**
   Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
   Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
   Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
4. **CAPACITORS:**
   Unit: p:pF or µF unless otherwise noted.
   Ratings: capacitor (µF)/ voltage (V) unless otherwise noted.
   Rated voltage: 50V except for electrolytic capacitors.
5. **COILS:**
   Unit: m:mH or µH unless otherwise noted.
6. **VOLTAGE AND CURRENT:**
   ▭ or ← V :
   DC voltage (V) at no input signal unless otherwise noted.
   ⇦ mA or ← mA :
   DC current at no input signal unless otherwise noted.
7. **OTHERS:**
   - ⊘ or ● : Adjusting point.
   - : Measurement point.
   - The ⚠ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
8. **SCH–□ ON THE SCHEMATIC DIAGRAM:**
   - SCH–□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)
9. **SWITCHES** (Underline indicates switch position):

S101 : AUDIO/VIDEO
S102 : LEARN·RESET
S1 : RECEIVER POWER
S2 : MUTING
S3 : MUSTER VOLUME –
S4 : MUSTER VOLUME +
S5 : TV POWER
S6 : 1
S7 : 2
S8 : 3
S9 : BAND TV FUNC
S10 : 4
S11 : 5
S12 : 6
S13 : 0/10
S14 : 7
S15 : 8
S16 : 9
S17 : FREQUENCY TV VOLUME –
S18 : FREQUENCY TV VOLUME +
S19 : STATION TV CHANNEL –
S20 : STATION TV CHANNEL +
(S5–S20: TUNER/TV)
S21 : SURR MODE
S22 : 3CH LOGIC
S23 : TEST TONE
S24 : CENTER MODE (DELAY TIME)
S25 : CENTER LEVEL·REAR LEVEL –
S26 : CENTER LEVEL·REAR LEVEL +
S27 : EFECT LEVEL –
S28 : EFECT LEVEL +
S29 : FUNCTION
S30 : TAPE2 MONITOR
S31 : DIRECT V.SEL
S32 : SLEEP RETURN
S33 : DISC SELECT – (DISC SIDE A)
S34 : DISC SELECT + (DISC SIDE B)
(S33–S34: CD/LD)
S35 : DECK I (VCR CH –)
S36 : DECK II (VCR CH +)
(S35–S36: TAPE/VCR)
S37 : ■
S38 : ▶
(S37–S38: CD/LD)
S39 : ◀
S40 : ▶
(S39–S40: TAPE/VCR)
S41 : ⏮ (◀◀ )
S42 : ⏭ (▶▶ )
(S41–S42: CD/LD)
S43 : ◀◀
S44 : ▶▶
(S43–S44: TAPE/VCR)
S45 : POWER
S46 : ❚❚
(S45–S46: CD/LD)
S47 : ■
S48 : POWER
(S47–S48: TAPE/VCR)
S49 : ASC1
S50 : ASC2
S51 : TAPE SELECT TV/VCR

SCH-13



VCC
D1
R1
2
Q1
R2
220
VCC
D2
BATT.+
BATT.–
C6
100/10
R8 100
C2
100/10
C3
0.1
/50
C1
220/25
X1 4M
C4
33p
C5
33p
R3
8.2k
D3
D4
C7 100p
R4
4.7k
R5
33k
IC1
SEN5
SEN4
SEN3
SEN2
SEN1
SEN0
SEN9
SEN8
SEN7
SEN6
SEN5
SEN6
SEN7
RMOUT
VccR
Vcc
XIN
XOUT
Vss1
REN
RMIN
CMKOUT
CHKIN
PB0/SI
PB1/SO
PB2/SCK
PB3/EXTH
Vss2
PA0
PA1
PA2
PA3
PA4
SCN4
SCN3
SCN2
SCN1
SCN0
RESET
TEST2
TEST1
PA7
PA6
PA5
33
32
31
30
29
28
27
26
25
24
23
34
35
36
37
38
39
40
41
42
43
44
22
21
20
19
18
17
16
15
14
13
12
1
2
3
4
5
6
7
8
9
10
11
VCC
R6
100k
D5
2(V.D)
1
IC2
3
S102
(2/2)
RESET
C8
0.1/50
S101
VIDEO/AUDIO
VCC
R7 200
D6
SEN0
SEN1
SEN2
SEN3
SEN4
SEN5
SEN6
SEN7
SCN0
SCN1
SCN2
SCN3
SCN4
SCN5
SCN6
S102 (1/2)
S103
S35
S15
S11
S3
S27
S23
S39
S43
S34
S14
S6
S7
S26
S22
S38
S47
S44
S19
S13
S8
S32
S24
S41
S46
S29
S18
S10
S2
S31
S21
S37
S42
S36
S16
S12
S4
S28
S20
S40
S51
S49
S5
S48
S50
S45
S33
S17
S9
S1
S30
S25

| | |
|---|---|
| IC1 | AZC1841 |
| IC2 | PST9121N |
| Q1 | 2SC3265 |
| D1 | SE303A-C |
| D2, D4, D5 | RLS73 |
| D3 | SPS-503C-3 |
| D6 | SLC-22VR |
| X1 | FCR4.0MC3 |

**SCH-13**

SCHEMATIC DIAGRAM
[For CU-VSX084 (AXD1385)]

SCHEMATIC DIAGRAM
[For CU-VSX084 (AXD1385)]

**SCH-13**

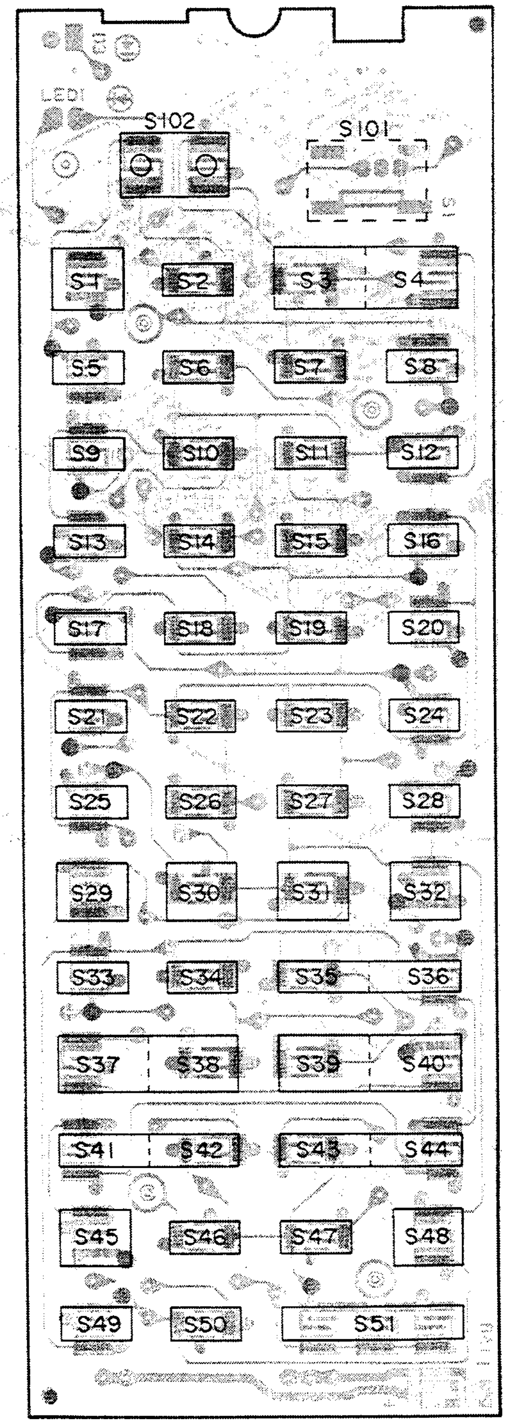
## ■ PCB PATTERN

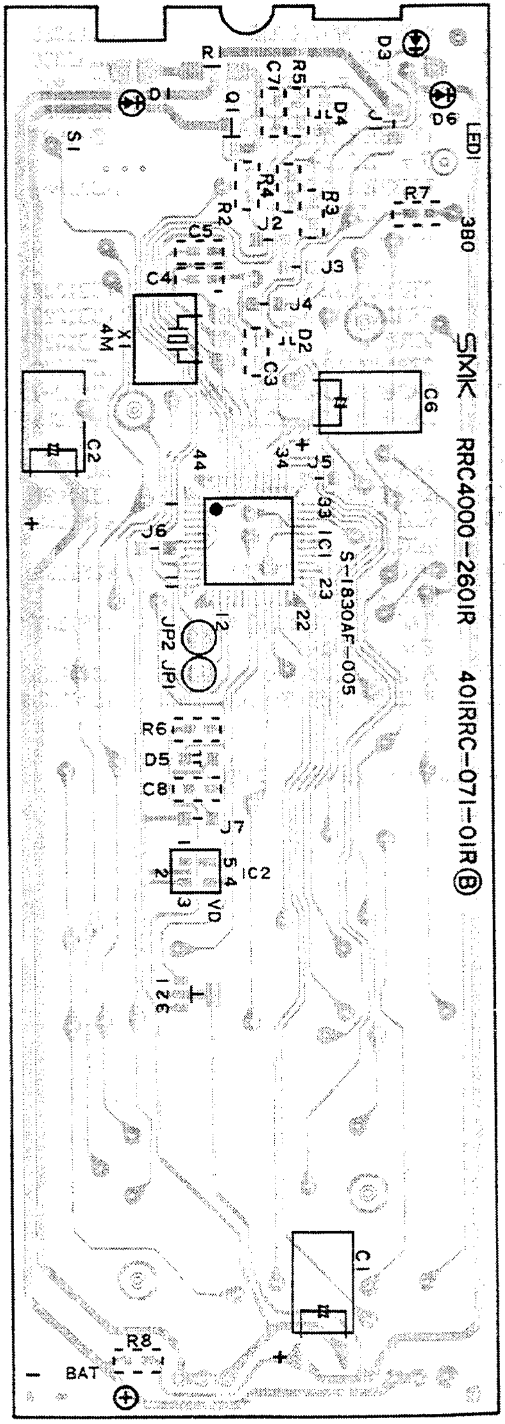
▯ : Indicates a chip resistor.

▯ : Indicates a chip capacitor.

⊣ : Indicates a chip transistor.

⊕ : Indicates a chip diode.


LED1
S102
S101
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18
S19
S20
S21
S22
S23
S24
S25
S26
S27
S28
S29
S30
S31
S32
S33
S34
S35
S36
S37
S38
S39
S40
S41
S42
S43
S44
S45
S46
S47
S48
S49
S50
S51


R1
D3
D1
C7
R5
D4
Q1
D6
S1
LED1
R4
R2
R3
R7
J2
3B0
C5
J3
C4
J4
X1
4M
D2
C3
SMK
C6
C2
44
34
J5
+
33
IC1
J6
23
S-1830AF-005
22
12
RRC4000-2601R
JP2
JP1
401RRC-071-01R Ⓑ
R6
D5
C8
J7
IC2
1
2
3
4
5
VD
C1
R8
BAT
-
+

## 10.2 FOR CU–VSX079 (AXD1394) AND CU–VSX080 (AXD1393)

### ■ EXPLODED VIEW AND PARTS LIST

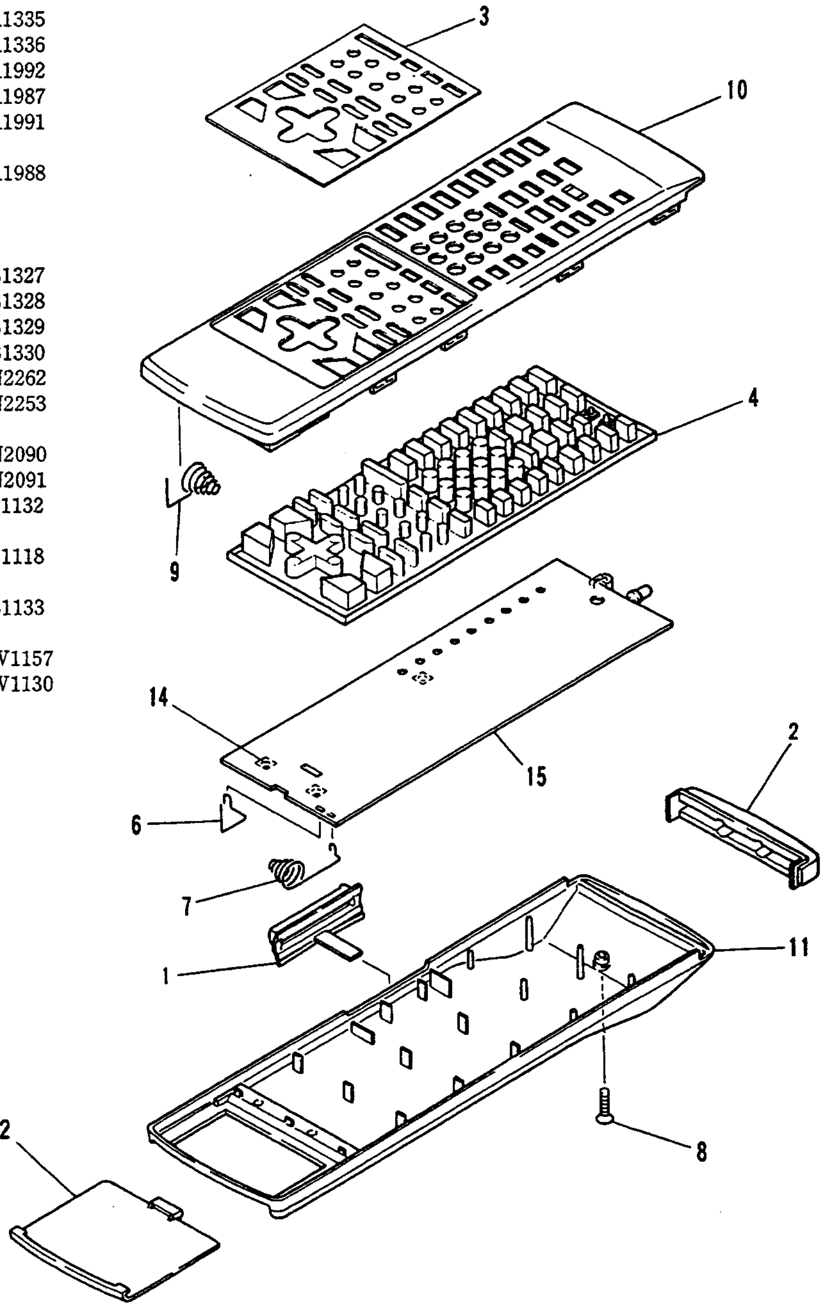
*NOTES:*

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

**Parts List**

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| | 1 | MODE CHECK KEY | AZA1335 |
| | 2 | FILTER | AZA1336 |
| | 3 | PLATE (For AXD1394) | AZA1992 |
| | 3 | PLATE (For AXD1393) | AZA1987 |
| | 4 | RUBBER SHEET (For AXD1394) | AZA1991 |
| | 4 | RUBBER SHEET (For AXD1393) | AZA1988 |
| | 5 | .................. | |
| | 6 | TERMINAL (+) | AZB1327 |
| | 7 | TERMINAL (−) | AZB1328 |
| | 8 | SCREW | AZB1329 |
| | 9 | TERMINAL (C) | AZB1330 |
| | 10 | CASE (A) (For AXD1394) | AZN2262 |
| | 10 | CASE (A) (For AXD1393) | AZN2253 |
| | 11 | CASE (B) | AZN2090 |
| | 12 | BATTERY COVER | AZN2091 |
| | 13 | SLIDE SW (S101) (AXD1394 only) | AZS1132 |
| | 14 | TACT SW (S102, S10, S14) (For AXD1394) | AZS1118 |
| | 14 | TACT SW (S102, S10, S14) (For AXD1393) | AZS1133 |
| NSP | 15 | P. C. BOARD (For AXD1394) | AZW1157 |
| NSP | 15 | P. C. BOARD (For AXD1393) | AZW1130 |

Note: The illustration shows AXD1394.



## ■ PCB PARTS LIST

*NOTES:*

- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

*Ex.1 When there are 2 effective digits(any digit apart from 0), such as 560 ohm and 47k ohm(tolerance is shown by J=5%, and K=10%).*
*560 Ω → 56 × $10^1$ → 561 ········· RD1/8PM$\boxed{5}\boxed{6}\boxed{1}$J*
*47k Ω → 47 × $10^3$ → 473 ········· RD1/4PS$\boxed{4}\boxed{7}\boxed{3}$J*
*0.5 Ω → 0R5 ········· RN2H$\boxed{0}\boxed{R}\boxed{5}$K*
*1 Ω → 010 ········· RS1P$\boxed{0}\boxed{1}\boxed{0}$K*
*Ex.2 When there are 3 effective digits(such as in high precision metal film resistors).*
*5.62k Ω → 562 × $10^1$ → 5621 ········· RN1/4PC$\boxed{5}\boxed{6}\boxed{2}\boxed{1}$F*

| Mark | No. | Description | Parts No. |
|---|---|---|---|
| SEMICONDUCTORS | | | |
| | IC1 | μ−COM | ACM001−042 |
| | IC2 | IC | AZC1564 |
| | IC3 | LOGIC IC | TC74HC138AF−TB |
| | Q1, 2 | CHIP TRANSISTOR | 2SC3052E |
| | Q3, 4 | TRANSISTOR | 2SD1622 |
| | D1−6 | DIODE | DWA010−TE |
| | D9−17 | LED | AZC1573 |
| | D7 | LED | SLR−938C |
| | D8 | DIODE | SPS−503C−3 |
| CAPACITORS | | | |
| | C1, 2 | CERAMIC CAPACITOR | CCDSL330J50 |
| | C3 | CERAMIC CAPACITOR | CCDSL221J50 |
| | C4 | CERAMIC CAPACITOR | CKDYX104M25 |
| | C5 | ELECT. CAPACITOR | CEAS470M10 |
| | C6 | CERAMIC CAPACITOR | CKDYB103K50 |
| | C7 | ELECT. CAPACITOR | CEAS221M10 |
| | C8 | ELECT. CAPACITOR | CEAS4R7M50 |
| RESISTORS | | | |
| | R7, 8 | CARBON FILM RESISTOR | RD1/4PMFL1R5J |
| | | Other resistors | RD1/8PM☐☐☐J |
| OTHERS | | | |
| | X1 | RESONATOR | AZC1570 |

## PCB PATTERN

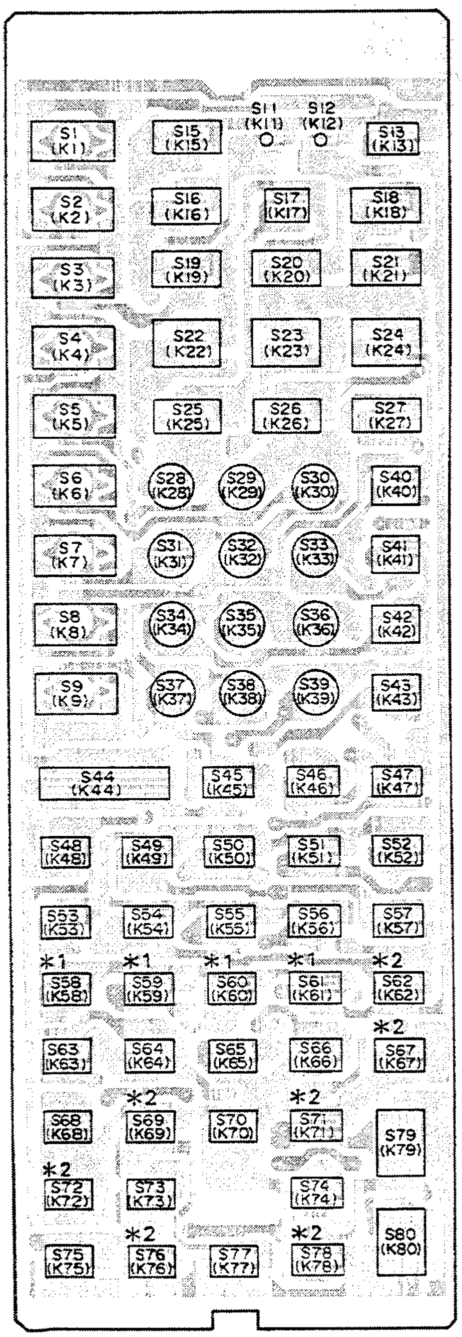
▭ : Indicates a chip resistor.

▮ : Indicates a chip capacitor.

⊠ : Indicates a chip transistor.

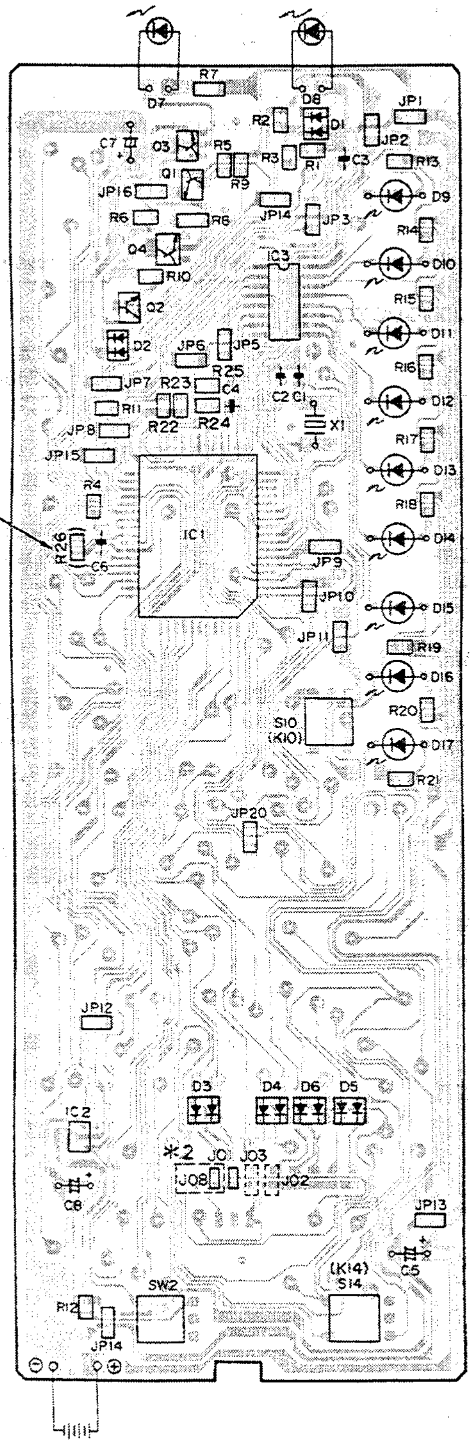
⊳| : Indicates a chip diode.

PCB-13


S1 (K1)
S15 (K15)
S11 (K11)
S12 (K12)
S13 (K13)
S2 (K2)
S16 (K16)
S17 (K17)
S18 (K18)
S3 (K3)
S19 (K19)
S20 (K20)
S21 (K21)
S4 (K4)
S22 (K22)
S23 (K23)
S24 (K24)
S5 (K5)
S25 (K25)
S26 (K26)
S27 (K27)
S6 (K6)
S28 (K28)
S29 (K29)
S30 (K30)
S40 (K40)
S7 (K7)
S31 (K31)
S32 (K32)
S33 (K33)
S41 (K41)
S8 (K8)
S34 (K34)
S35 (K35)
S36 (K36)
S42 (K42)
S9 (K9)
S37 (K37)
S38 (K38)
S39 (K39)
S43 (K43)
S44 (K44)
S45 (K45)
S46 (K46)
S47 (K47)
S48 (K48)
S49 (K49)
S50 (K50)
S51 (K51)
S52 (K52)
S53 (K53)
S54 (K54)
S55 (K55)
S56 (K56)
S57 (K57)
*1 S58 (K58)
*1 S59 (K59)
*1 S60 (K60)
*1 S61 (K61)
*2 S62 (K62)
S63 (K63)
S64 (K64)
S65 (K65)
S66 (K66)
*2 S67 (K67)
S68 (K68)
*2 S69 (K69)
S70 (K70)
*2 S71 (K71)
S79 (K79)
*2 S72 (K72)
S73 (K73)
S74 (K74)
S80 (K80)
S75 (K75)
*2 S76 (K76)
S77 (K77)
*2 S78 (K78)

*1 : AXD1394 only
*2 : AXD1393 only

One time version only


D7
R7
D8
R2
D1
JP1
C7
Q3
R5
R3
R1
C3
JP2
R13
Q1
R9
D9
JP16
JP14
JP3
R6
R8
R14
Q4
IC3
D10
R10
R15
Q2
D11
D2
JP6
JP5
R16
R25
JP7
R23
C4
C2
C1
D12
R11
R22
R24
X1
JP8
R17
JP15
D13
R4
R18
R26
C6
IC1
D14
JP9
JP10
D15
JP11
R19
D16
S10 (K10)
R20
D17
R21
JP20
JP12
D3
D4
D6
D5
IC2
*2 J01
J03
J08
J02
C8
JP13
C5
(K14) S14
SW2
R12
JP14
⊖
⊕

## ■ SCHEMATIC DIAGRAM

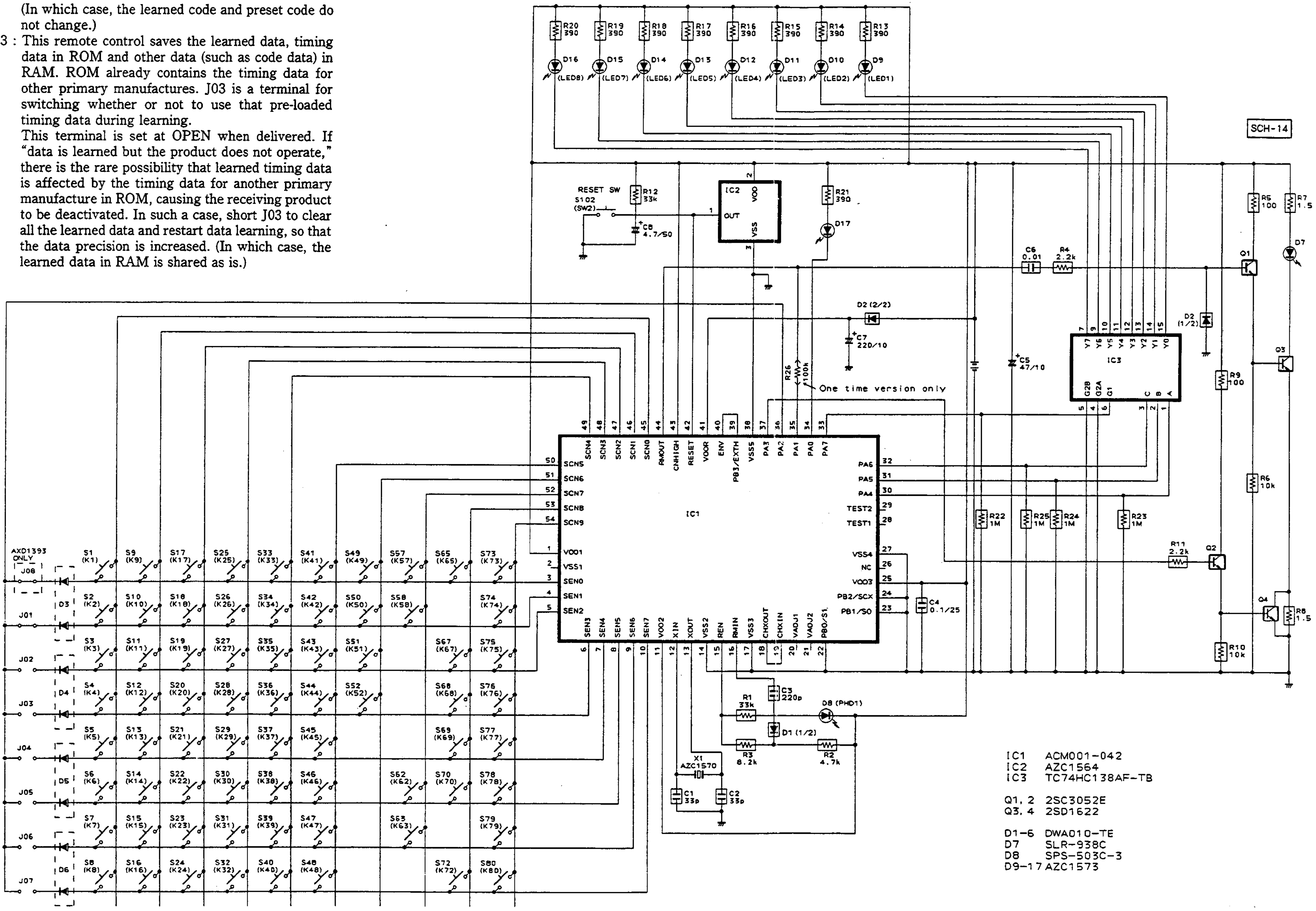
NOTE)

J02 : The terminal for switching Fc (carrier frequency of the fixed code). This terminal is set at OPEN (Fc = 40kHz) when delivered. If a product of another manufacture accidentally receives the PIONEER code, short the terminal so that Fc will be 36.7kHz. (In which case, the learned code and preset code do not change.)

J03 : This remote control saves the learned data, timing data in ROM and other data (such as code data) in RAM. ROM already contains the timing data for other primary manufactures. J03 is a terminal for switching whether or not to use that pre-loaded timing data during learning.
This terminal is set at OPEN when delivered. If "data is learned but the product does not operate," there is the rare possibility that learned timing data is affected by the timing data for another primary manufacture in ROM, causing the receiving product to be deactivated. In such a case, short J03 to clear all the learned data and restart data learning, so that the data precision is increased. (In which case, the learned data in RAM is shared as is.)

NOTE

- : Indicates a chip resistor.
- : Indicates a chip capacitor.
- : Indicates a chip transistor.
- : Indicates a chip diode.


R20 390
R19 390
R18 390
R17 390
R16 390
R15 390
R14 390
R13 390
D16 (LED8)
D15 (LED7)
D14 (LED6)
D13 (LED5)
D12 (LED4)
D11 (LED3)
D10 (LED2)
D9 (LED1)
SCH-14
RESET SW S102 (SW2)
R12 33k
C8 4.7/50
IC2
VDD
OUT
VSS
R21 390
D17
C6 0.01
R4 2.2k
D2 (2/2)
C7 220/10
R26 100k
One time version only
C5 47/10
IC3
Y7 Y6 Y5 Y4 Y3 Y2 Y1 Y0
G2B G2A G1 C B A
D2 (1/2)
R5 100
R7 1.5
D7
Q1
Q3
R9 100
R6 10k
R11 2.2k
Q2
Q4
R8 1.5
R10 10k
IC1
SCN4 SCN3 SCN2 SCN1 SCN0 RMOUT CNHIGH RESET VDDR ENV PB3/EXTH VSS5 PA3 PA2 PA1 PA0 PA7
SCN5 SCN6 SCN7 SCN8 SCN9 VDD1 VSS1 SEN0 SEN1 SEN2
PA6 PA5 PA4 TEST2 TEST1 VSS4 NC VDD3 PB2/SCX PB1/SO
SEN3 SEN4 SEN5 SEN6 SEN7 VDD2 XIN XOUT VSS2 REN RMIN VSS3 CHKOUT CHKIN VADJ1 VADJ2 PB0/SI
R22 1M
R25 1M
R24 1M
R23 1M
C4 0.1/25
C3 220p
D8 (PHD1)
R1 33k
D1 (1/2)
R3 8.2k
R2 4.7k
X1 AZC1570
C1 33p
C2 33p
AXD1393 ONLY
J08
J01
J02
J03
J04
J05
J06
J07
D3
D4
D5
D6
S1 (K1)
S2 (K2)
S3 (K3)
S4 (K4)
S5 (K5)
S6 (K6)
S7 (K7)
S8 (K8)
S80 (K80)

IC1 ACM001-042
IC2 AZC1564
IC3 TC74HC138AF-TB

Q1, 2 2SC3052E
Q3, 4 2SD1622

D1-6 DWA010-TE
D7 SLR-938C
D8 SPS-503C-3
D9-17 AZC1573

SWITCHES

S101 : CENT.·BAL./REAR·REAR BAL.
S102 RESET
S1 : VCR1
S2 : VCR2
S3 : LD
S4 : TV
S5 : CD
S6 : TUNER
S7 : DECK Ⅰ
S8 : DECK Ⅱ
S9 : DAT
S10 : MODE CHECK
S11 : LEARN
S12 : EDIT
S13 : MULTI COMMAND
S14 : M.CLEAR
S15 : POWER
S16 : ⏮
S17 : REC
S18 : ⏭
S19 : ◀◀
S20 : ◀ (SEARCH)
S21 : ▶▶
S22 : ⏸
S23 : ■
S24 : ▶
S25 : TV/VCR (+10)
S26 : SELECT (DISP)
S27 : TV FUNC (BAND)
S28 : 1
S29 : 2
S30 : 3
S31 : 4
S32 : 5
S33 : 6
S34 : 7
S35 : 8
S36 : 9
S37 : 10/0
S38 : 11/PGM
S39 : 12/CLEAR
S40 : TV VOL/DISC SEL +
S41 : TV VOL/DISC SEL −
S42 : FREQ/CH (∧)
S43 : FREQ/CH (V)
S44 : RECEIVER POWER
S45 : AUTO SOURCE CONTROL 1
S46 : AUTO SOURCE CONTROL 2
S47 : SLEEP
S48 : TAPE1
S49 : TAPE2
S50 : PHONO
S51 : TUNER
S52 : CD
S53 : VCR1
S54 : VCR2
S55 : VIDEO
S56 : TV
S57 : LD
S58 : RETURN
S59 : DIRECT (AXD1394 ONLY)
S60 : V.SEL
S61 : S.BASS
S62 : S.BASS (AXD1393 ONLY)
S63 : SURR.MODE (FOR AXD1394)
S63 : RETURN (FOR AXD1393)
S64 : 3CH LOGIC (FOR AXD1394)
S64 : DIRECT (FOR AXD1393)
S65 : DELAY TIME (FOR AXD1394)
S65 : V.SEL (FOR AXD1393)
S66 : MUTING (FOR AXD1394)
S66 : DISPLAY (FOR AXD1393)
S67 : MUTING (AXD1393 ONLY)
S68 : GRAPHIC (FOR AXD1394)
S68 : SURR.MODE (FOR AXD1393)
S69 : 3CH LOGIC (AXD1393 ONLY)
S70 : ▲ (FOR AXD1394)
S70 : CENT.MODE (FOR AXD1393)
S71 : TEST TONE (AXD1393 ONLY)
S72 : REAR LEVEL + (AXD1393 ONLY)
S73 : ◀ (FOR AXD1394)
S73 : CENTER LEVEL + (FOR AXD1393)
S74 : ▶ (FOR AXD1394)
S74 : EFFECT LEVEL + (FOR AXD1393)
S75 : ENTER (FOR AXD1394)
S75 : REAR LEVEL − (FOR AXD1393)
S76 : CENTER LEVEL − (AXD1393 ONLY)
S77 : ▼ (FOR AXD1394)
S77 : DELAY TIME (FOR AXD1393)
S78 : EFFECT LEVEL − (AXD1393 ONLY)
S79 : MASTER VOLUME +
S80 : MASTER VOLUME −

**SCH-14**

SCHEMATIC DIAGRAM
[For CU-VSX079 (AXD1394)]
[For CU-VSX080 (AXD1393)]

SCHEMATIC DIAGRAM
[For CU-VSX079 (AXD1394)]
[For CU-VSX080 (AXD1393)]

SCH-14

# 11. FOR VSX–D903S/KC, SD, VSX–D933S/HL, VSX–D603S/SD, VSX–D613S/KC AND VSX–D633S/HL

*NOTES:*
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

*Ex.1 When there are 2 effective digits(any digit apart from 0), such as 560 ohm and 47k ohm(tolerance is shown by J=5%, and K=10%).*
*560 Ω → 56 × 10¹ → 561 ······························ RD1/8PM*$\boxed{5}\boxed{6}\boxed{1}$*J*
*47k Ω → 47 × 10³ → 473 ······························ RD1/4PS*$\boxed{4}\boxed{7}\boxed{3}$*J*
*0.5 Ω → 0R5 ······························ RN2H*$\boxed{0}\boxed{R}\boxed{5}$*K*
*1 Ω → 010 ······························ RS1P*$\boxed{0}\boxed{1}\boxed{0}$*K*
*Ex.2 When there are 3 effective digits(such as in high precision metal film resistors).*
*5.62k Ω → 562 × 10¹ → 5621 ······························ RN1/4PC*$\boxed{5}\boxed{6}\boxed{2}\boxed{1}$*F*

## 11.1 CONTRAST OF MISCELLANEOUS PARTS FOR VSX–D903S/KC, SD AND VSX–D933S/HL

VSX-D903S/KC, SD, VSX-D933S/HL and VSX-D903S/KU have the same construction except for the following :

| Mark | Symbol & Description | Part No. | | | | Remarks |
|---|---|---|---|---|---|---|
| | | VSX-D903S /KU | VSX-D903S /KC | VSX-D903S /SD | VSX-D933S /HL | |
| NSP | POWER SUPPLY AMP ASSY | AWK1789 | AWK1789 | AWK1790 | AWK1791 | |
| | POWER AMP ASSY | AWZ5402 | AWZ5402 | AWZ5402 | AWZ5594 | |
| | POWER SUPPLY ASSY | AWZ5404 | AWZ5404 | AWZ5404 | AWZ5410 | |
| | PRIM ASSY | AWZ5405 | AWZ5405 | AWZ5409 | AWZ5411 | |
| NSP | R. C. SP ASSY | AWZ5408 | AWZ5408 | AWZ5408 | AWZ5726 | |
| | SW ASSY | AWZ5412 | AWZ5412 | AWZ5412 | • • • • • • | |
| NSP | SMALL SIGNAL ASSY | AWK1796 | AWK1796 | AWK1796 | AWK1866 | |
| | TONE ASSY | AWZ5420 | AWZ5420 | AWZ5420 | AWZ5723 | |
| | VOL ASSY | AWZ5421 | AWZ5421 | AWZ5421 | AWZ5724 | |
| ⚠ | Capacitor (C1 : 0.1 μ , 250V) | • • • • • • | • • • • • • | ACE-507 | • • • • • • | ∗ 1 |
| ⚠ | Power transformer (T1) (AC120V) | ATS1545 | ATS1545 | • • • • • • | • • • • • • | |
| ⚠ | Power transformer (T1) (AC110V/120-127V/220V/240V) | • • • • • • | • • • • • • | ATS1546 | • • • • • • | |
| ⚠ | Power transformer (T1) (AC220-230V/240V) | • • • • • • | • • • • • • | • • • • • • | ATS1548 | |
| ⚠ | Voltage selector (S1) (AC110V/120-127V/220V/240V) | • • • • • • | • • • • • • | AKX-507 | • • • • • • | ∗ 1 |
| ⚠ | Voltage selector (S2) (AC110V, 120-127V/220V, 240V) | • • • • • • | • • • • • • | AKX1004 | • • • • • • | ∗ 1 |
| ⚠ | Slide switch (S3) (CHANNEL STEP/FM DE-EMPHASIS) | • • • • • • | • • • • • • | ASH1044 | • • • • • • | ∗ 1 |
| ⚠ | Fuse holder | • • • • • • | • • • • • • | AKR1005 | • • • • • • | ∗ 1 |
| ⚠ | Fuse (10A, 125V) (FU1) | AEK1035 | AEK1035 | • • • • • • | • • • • • • | |
| ⚠ | Fuse (T4A, 250V) (FU1) | • • • • • • | • • • • • • | • • • • • • | AEK-514 | |
| ⚠ | Fuse (5A, 125V) (FU1, FU2) | • • • • • • | • • • • • • | AEK-126 | • • • • • • | ∗ 1 |
| ⚠ | Fuse (4A, 125V) (FU3, FU4) | AEK-125 | AEK-125 | AEK-125 | • • • • • • | |
| ⚠ | Fuse (T3.15A, 250V) (FU3, FU4) | • • • • • • | • • • • • • | • • • • • • | AEK-513 | |
| ⚠ | Fuse (1.6A, 125V) (FU5, FU6) | AEK-121 | AEK-121 | AEK-121 | • • • • • • | |
| ⚠ | Fuse (T1.6A, 250V) (FU5, FU6) | • • • • • • | • • • • • • | • • • • • • | AEK-510 | |
| ⚠ | AC power cord | ADG1146 | ADG1146 | ADG1051 | ADG1049 | |
| | Rear panel | ANC2197 | ANC2197 | ANC2198 | ANC2199 | |

∗ 1 : Refer to the section " 3.2 INTERIOR ".

| Mark | Symbol & Description | Part No. | | | | Remarks |
|---|---|---|---|---|---|---|
| | | VSX-D903S /KU | VSX-D903S /KC | VSX-D903S /SD | VSX-D933S /HL | |
| NSP | Fuse holder fitting metal | • • • • • • | • • • • • • | ANG-528 | • • • • • • | ∗ 1 |
| NSP | Earth plate | • • • • • • | • • • • • • | ANK1257 | ANK1257 | ∗ 1 |
| ⚠ | AC cord stopper | AEP-113 | AEP-113 | AEC-882 | AEC-882 | |
| NSP | Barrier | • • • • • • | • • • • • • | AEC1412 | • • • • • • | ∗ 1 |
| | 65 label | ORW1069 | • • • • • • | • • • • • • | • • • • • • | |
| | Screw | VMZ26P040FZK | VMZ26P040FZK | VMZ26P040FZK | • • • • • • | |
| | Front panel | AMB2492 | AMB2492 | AMB2492 | AMB2510 | |
| | Operating instructions (English) | ARB1489 | ARB1489 | ARB1489 | • • • • • • | |
| | Operating instructions (English, Chinese) | • • • • • • | • • • • • • | • • • • • • | ARE1319 | |
| | Operating instructions (Spanish, Chinese) | • • • • • • | • • • • • • | ARC1479 | • • • • • • | |
| | Operating instructions (French) | • • • • • • | ARC1478 | • • • • • • | • • • • • • | |
| | Packing case | AHD2766 | AHD2766 | AHD2767 | AHD2768 | |

∗ 1 : Refer to the section " 3.2 INTERIOR ".

## POWER AMP ASSY

AWZ5594 and AWZ5402 have the same construction except for the following :

| Mark | Symbol & Description | Part No. | | Remarks |
|---|---|---|---|---|
| | | AWZ5402 | AWZ5594 | |
| | C113, C114 | CCCSL150K500 | CCCSL330K500 | |
| | C115, C116 | • • • • • • | CCCSL330K500 | |
| | C125, C126, C173, C214 | CFTXA473J50 | CFTXA104J50 | |
| | C127, C128, C174, C215 | • • • • • • | CFTXA104J50 | |
| | C167, C208 | CCCSL220K500 | CCCSL470K500 | |
| | C168, C209 | • • • • • • | CCCSL470K500 | |
| | R121, R122, R171 | RD1/4PMF680J | RD1/4PMFL680J | |
| | R129-R132, R175, R176 | RD1/4PMF101J | RD1/4PMFL101J | |
| | R139-R142, R180, R181, R220, R221 | RD1/4PMF4R7J | RD1/4PMFL4R7J | |
| | R147, R148, R184, R223 | RD1/4PMF100J | RD1/4PMFL100J | |

## POWER SUPPLY ASSY

AWZ5410 and AWZ5404 have the same construction except for the following :

| Mark | Symbol & Description | Part No. | | Remarks |
|---|---|---|---|---|
| | | AWZ5404 | AWZ5410 | |
| | Q361 | XDC143ES | • • • • • • | |
| | D352 | D5SB20F | • • • • • • | |
| | D361 | HSS104-02 | • • • • • • | |
| | RY361, RY362 | ASR1027 | • • • • • • | |
| | C352 (0.01 μ , AC250V) | ACG1005 | • • • • • • | |
| | R361 | RS1PMF471J | • • • • • • | |

## PRIM ASSY

AWZ5409, AWZ5411 and AWZ5405 have the same construction except for the following :

| Mark | Symbol & Description | Part No. | | | Remarks |
|---|---|---|---|---|---|
| | | AWZ5405 | AWZ5409 | AWZ5411 | |
| ⚠ | T51 | ATT1011 | ATT1193 | ATT1193 | |
| ⚠ | R52 (2.2M Ω , 1/2W) | ACN-208 | • • • • • | • • • • • | |
| ⚠ | AC OUTLET (3P) | AKP1053 | AKP1053 | • • • • • | |

## R. C. SP ASSY

AWZ5726 and AWZ5408 have the same construction except for the following :

| Mark | Symbol & Description | Part No. | | Remarks |
|---|---|---|---|---|
| | | AWZ5408 | AWZ5726 | |
| | R271 | RD1/8PM222J | RD1/8PM332J | |

## TONE ASSY

AWZ5723 and AWZ5420 have the same construction except for the following :

| Mark | Symbol & Description | Part No. | | Remarks |
|---|---|---|---|---|
| | | AWZ5420 | AWZ5723 | |
| | R603, R604 | RS1/10S562J | RS1/10S113J | |
| | R613, R614 | RD1/8PM334J | RD1/8PM624J | |

## VOL ASSY

AWZ5724 and AWZ5421 have the same construction except for the following :

| Mark | Symbol & Description | Part No. | | Remarks |
|---|---|---|---|---|
| | | AWZ5421 | AWZ5724 | |
| | R5573, R5574 | RD1/8PM562J | RD1/8PM113J | |
| | R5583, R5584 | RD1/8PM334J | RD1/8PM624J | |

## 11.2 CONTRAST OF MISCELLANEOUS PARTS FOR VSX–D603S/SD, VSX–D613S/KC AND VSX–D633S/HL

VSX - D603S/SD, VSX - D613S/KC, VSX - D633S/HL and VSX - D603S/KU have the same construction except for the following :

| **Mark** | **Symbol & Description** | **Part No.** | | | | **Remarks** |
|---|---|---|---|---|---|---|
| | | **VSX - D603S /KU** | **VSX - D603S /SD** | **VSX - D613S /KC** | **VSX - D633S /HL** | |
| NSP | POWER SUPPLY AMP ASSY | AWK1794 | AWK1795 | AWK1794 | AWK1793 | |
| | POWER AMP ASSY | AWZ5402 | AWZ5402 | AWZ5402 | AWZ5594 | |
| | POWER SUPPLY ASSY | AWZ5437 | AWZ5437 | AWZ5437 | AWZ5410 | |
| | PRIM ASSY | AWZ5405 | AWZ5409 | AWZ5405 | AWZ5411 | |
| NSP | R. C. SP ASSY | AWZ5414 | AWZ5414 | AWZ5414 | AWZ5727 | |
| NSP | SMALL SIGNAL ASSY | AWK1799 | AWK1799 | AWK1799 | AWK1867 | |
| | TONE ASSY | AWZ5426 | AWZ5426 | AWZ5426 | AWZ5725 | |
| | VOL ASSY | AWZ5421 | AWZ5421 | AWZ5421 | AWZ5724 | |
| ⚠ | Capacitor (C1 : 0.1 $\mu$ , 250V) | • • • • • | ACE - 507 | • • • • • | • • • • • | ∗ 1 |
| ⚠ | Power transformer (T1) (AC120V) | ATS1545 | • • • • • | ATS1545 | • • • • • | |
| ⚠ | Power transformer (T1) (AC110V/120 - 127V/220V/240V) | • • • • • | ATS1546 | • • • • • | • • • • • | |
| ⚠ | Power transformer (T1) (AC220 - 230V /240V) | • • • • • | • • • • • | • • • • • | ATS1548 | |
| ⚠ | Voltage selector (S1) (AC110V/120 - 127V/220V/240V) | • • • • • | AKX - 507 | • • • • • | • • • • • | ∗ 1 |
| ⚠ | Voltage selector (S2) (AC110V, 120 - 127V/220V, 240V) | • • • • • | AKX1004 | • • • • • | • • • • • | ∗ 1 |
| ⚠ | Slide switch (S3) (CHANNEL STEP/FM DE - EMPHASIS) | • • • • • | ASH1044 | • • • • • | • • • • • | ∗ 1 |
| ⚠ | Fuse holder | • • • • • | AKR1005 | • • • • • | • • • • • | ∗ 1 |
| ⚠ | Fuse (10A, 125V) (FU1) | AEK1035 | • • • • • | AEK1035 | • • • • • | |
| ⚠ | Fuse (T4A, 250V) (FU1) | • • • • • | • • • • • | • • • • • | AEK - 514 | |
| ⚠ | Fuse (5A, 125V) (FU1, FU2) | • • • • • | AEK - 126 | • • • • • | • • • • • | ∗ 1 |
| ⚠ | Fuse (4A, 125V) (FU3, FU4) | AEK - 125 | AEK - 125 | AEK - 125 | • • • • • | |
| ⚠ | Fuse (T3.15A, 250V) (FU3, FU4) | • • • • • | • • • • • | • • • • • | AEK - 513 | |
| ⚠ | Fuse (1.6A, 125V) (FU5, FU6) | AEK - 121 | AEK - 121 | AEK - 121 | • • • • • | |
| ⚠ | Fuse (T1.6A, 250V) (FU5, FU6) | • • • • • | • • • • • | • • • • • | AEK - 510 | |
| ⚠ | AC power cord | ADG1146 | ADG1051 | ADG1146 | ADG1049 | |
| | Rear panel | ANC2193 | ANC2194 | ANC2193 | ANC2235 | |
| NSP | Fuse holder fitting metal | • • • • • | ANG - 528 | • • • • • | • • • • • | ∗ 1 |
| ⚠ | AC cord stopper | AEP - 113 | AEC - 882 | AEP - 113 | AEC - 882 | |
| NSP | Barrier | • • • • • | AEC1412 | • • • • • | • • • • • | ∗ 1 |
| | 65 label | ORW1069 | • • • • • | • • • • • | • • • • • | |
| | Screw | • • • • • | VMZ26P040FZK | • • • • • | • • • • • | ∗ 1 (No.106) |
| | Front panel | AMB2488 | AMB2488 | AMB2491 | AMB2518 | |
| | Operating instructions (English) | ARB1477 | ARB1477 | • • • • • | • • • • • | |
| | Operating instructions (English, French) | • • • • • | • • • • • | ARE1310 | • • • • • | |
| | Operating instructions (English, Chinese) | • • • • • | • • • • • | • • • • • | ARE1320 | |
| | Operating instructions (Spanish, Chinese) | • • • • • | ARC1468 | • • • • • | • • • • • | |
| | Remote control unit (CU - VSX084) | AXD1385 | AXD1385 | • • • • • | AXD1385 | |
| | Remote control unit (CU - VSX080) | • • • • • | • • • • • | AXD1393 | • • • • • | |
| NSP | Alkaline (LR03, AAA) | AEX1006 | AEX1006 | • • • • • | AEX1006 | |
| NSP | Alkaline (LR6, AA) | • • • • • | • • • • • | AEX1007 | • • • • • | |
| | Packing case | AHD2753 | AHD2754 | AHD2755 | AHD2770 | |
| | Battery cover (For remote control unit) | AZN2256 | AZN2256 | AZN2091 | AZN2256 | |

∗ 1 : Refer to the section " 3.2 INTERIOR ".

## POWER AMP ASSY

AWZ5594 and AWZ5402 have the same construction except for the following :

| Mark | Symbol & Description | Part No. | | Remarks |
|---|---|---|---|---|
| | | AWZ5402 | AWZ5594 | |
| | C113, C114 | CCCSL150K500 | CCCSL330K500 | |
| | C115, C116 | • • • • • | CCCSL330K500 | |
| | C125, C126, C173, C214 | CFTXA473J50 | CFTXA104J50 | |
| | C127, C128, C174, C215 | • • • • • | CFTXA104J50 | |
| | C167, C208 | CCCSL220K500 | CCCSL470K500 | |
| | C168, C209 | • • • • • | CCCSL470K500 | |
| | R121, R122, R171 | RD1/4PMF680J | RD1/4PMFL680J | |
| | R129-R132, R175, R176 | RD1/4PMF101J | RD1/4PMFL101J | |
| | R139-R142, R180, R181, R220, R221 | RD1/4PMF4R7J | RD1/4PMFL4R7J | |
| | R147, R148, R184, R223 | RD1/4PMF100J | RD1/4PMFL100J | |

## POWER SUPPLY ASSY

AWZ5410 and AWZ5437 have the same construction except for the following :

| Mark | Symbol & Description | Part No. | | Remarks |
|---|---|---|---|---|
| | | AWZ5437 | AWZ5410 | |
| | Q361 | XDC143ES | • • • • • | |
| | D352 | D5SB20F | • • • • • | |
| | D361 | HSS104-02 | • • • • • | |
| | RY361, RY362 | ASR1027 | • • • • • | |
| | C352 (0.01 μ , AC250V) | ACG1005 | • • • • • | |
| | R361 | RS1PMF471J | • • • • • | |

## PRIM ASSY

AWZ5409, AWZ5411 and AWZ5405 have the same construction except for the following :

| Mark | Symbol & Description | Part No. | | | Remarks |
|---|---|---|---|---|---|
| | | AWZ5405 | AWZ5409 | AWZ5411 | |
| ⚠ | T51 | ATT1011 | ATT1193 | ATT1193 | |
| ⚠ | R52 (2.2M Ω , 1/2W) | ACN-208 | • • • • • | • • • • • | |
| ⚠ | AC OUTLET (3P) | AKP1053 | AKP1053 | • • • • • | |

## R. C. SP. ASSY

AWZ5727 and AWZ5414 have the same construction except for the following :

| Mark | Symbol & Description | Part No. | | Remarks |
|---|---|---|---|---|
| | | AWZ5414 | AWZ5727 | |
| | R271 | RD1/8PM222J | RD1/8PM332J | |

## TONE ASSY

AWZ5725 and AWZ5426 have the same construction except for the following :

| Mark | Symbol & Description | Part No. | | Remarks |
|---|---|---|---|---|
| | | AWZ5426 | AWZ5725 | |
| | R603, R604 | RS1/10S562J | RS1/10S113J | |
| | R613, R614 | RD1/8PM334J | RD1/8PM624J | |

## VOL ASSY

AWZ5724 and AWZ5421 have the same construction except for the following :

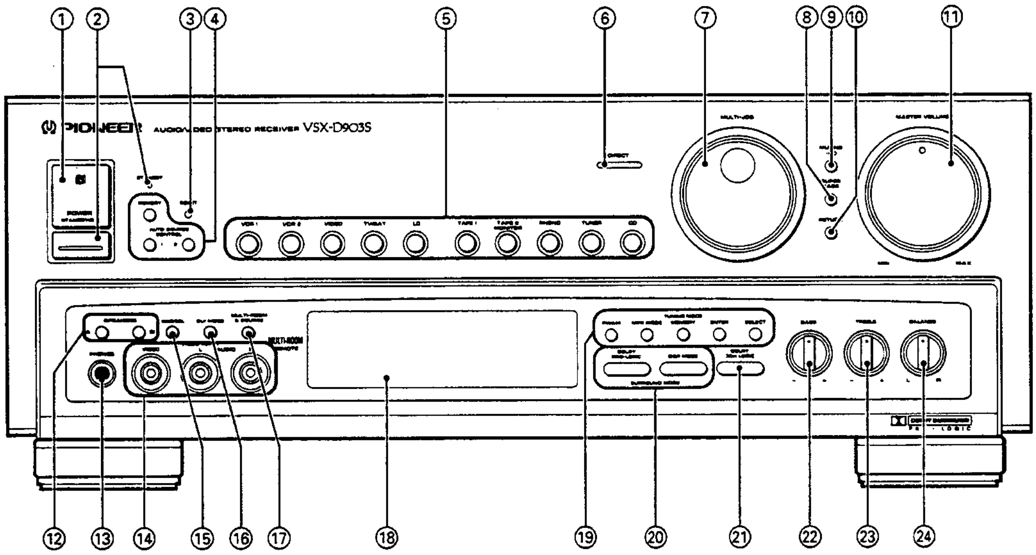
| Mark | Symbol & Description | Part No. | | Remarks |
|---|---|---|---|---|
| | | AWZ5421 | AWZ5724 | |
| | R5573, R5574 | RD1/8PM562J | RD1/8PM113J | |
| | R5583, R5584 | RD1/8PM334J | RD1/8PM624J | |

# 12. PANEL FACILITIES

## 12.1 FRONT PANEL FACILITIES

### ■ FOR VSX–D903S, VSX–53 AND VSX–D703S MODELS

•Illustration shows VSX–D903S model.


①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
PIONEER
VSX-D903S
⑫
⑬
⑭
⑮
⑯
⑰
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⑳
㉑
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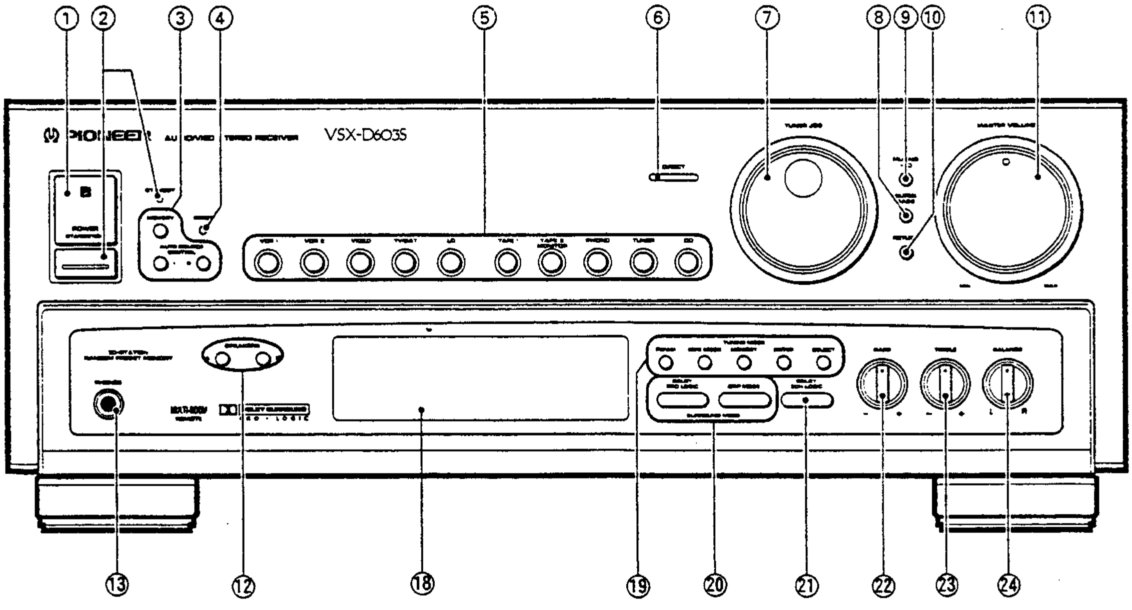
㉔

### ■ FOR VSX–D603S MODEL


①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
PIONEER
VSX-D603S
⑬
⑫
⑱
⑲
⑳
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### ① Remote sensor

### ② POWER STANDBY/ON switch/STANDBY indicator

This is the switch for electric power.

**ON** : When set to the ON position, power is supplied and the unit becomes operational.

**STANDBY** : When set to STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.

The STANDBY indicator lights when the power is STANDBY, and goes out during ON.

**[Timer ON/OFF possible]**

When the unit is switched ON, ON/OFF control can be performed by means of the optional timer.

***NOTE:***

*When the power is initially turned ON, muting will be applied to prevent sound from being output for about 5 seconds.*

### ③ RESET button

Use this when normal operation becomes impossible because of external influences such as static electricity or lightning, or when operation is impossible even when operation buttons are pressed. Press this button to return to normal operating conditions. (The input selector automatically switches to TUNER, and SPEAKERS A and B switch off.)

If you press this button when the power is ON, the unit switches to POWER STANDBY.

### ④ AUTO SOURCE CONTROL/MEMORY buttons

**1, 2 buttons:**

These buttons are for memorizing and recalling your current settings. Both 1 and 2 can be used to memorize settings. If you connect another component, such as a CD player, to the CONTROL OUT jack on the rear panel, the signals to switch power on and start play are also transmitted.

**MEMORY:**

Use when memorizing settings to a 1, 2 button.

### ⑤ Input selector buttons

**VCR 1** : Press when performing playback on a first VCR unit.

**VCR 2** : Press when performing playback on a second VCR unit.

**VIDEO** : Press when performing playback on a VCR connected to VIDEO INPUT jacks on the front panel.

**TV/SAT** : Press when using a TV tuner connected to the TV/ SAT jacks.

**LD** : Press when performing playback on an LD player.

**TAPE 1** : Press when performing playback on a cassette deck.

**TAPE 2 MONITOR** : Press when performing playback on a second cassette deck and when monitoring recording.

**PHONO** : Press when playing records on turntable.

**TUNER** : Press when listening to radio broadcasts.

**CD** : Press when playing compact discs on a CD player.

### ⑥ DIRECT button

Press this to listen to source sound without passing the audio signal through sound quality and balance adjusting circuitry.

The surround mode, super bass, and rear and center speakers are automatically switched off.

### ⑦ MULTI-JOG (VSX-D903S model only)

Use during tuner operation to select frequencies and station numbers. During GUI operation, use to move the on-screen cursor.

### ⑦ TUNER JOG
(VSX-53, VSX-D703S and VSX-D603S models only)

Use to tune into a broadcast.

### ⑧ SUPER BASS button

Switch on when you want to boost bass. This does not operate when the DIRECT button is on.

### ⑨ MUTING button

Press to temporarily cut off the sound volume. When pressed again, the sound will return to its previous level.

### ⑩ RETURN button

Press this button to return the receiver into the initial state. TUNER is selected at this initial state. Adjust the sound level by using the MASTER VOLUME control.

- TAPE 2 MONITOR .........OFF
- SURROUND MODE ...... OFF
- MUTING ..................... OFF
- FUNCTION .................. TUNER
- V-SIGNAL SELECTOR ....... OFF

And SPEAKERS buttons switch as follows.

| Before pressing the RETURN button | | After pressing |
|---|---|---|
| Both A and B are off | → | Only A is on |
| Only A is on | → | No change |
| Only B is on | → | Both A and B are on |
| Both A and B are on | → | No change |

***NOTE:***

*Press the RETURN button, and the frequency last selected is received. If reception of a station is not possible with that frequency, the mode automatically switches to AUTO TUNING.*

### ⑪ MASTER VOLUME control

Use it to simultaneously adjust the sound volume from the front, center, and rear speakers.

### ⑫ SPEAKERS buttons (A, B)

ON/OFF switches for the A and B speaker systems. (Indicator in the display section lights.)

### ⑬ PHONES jack

Connect the plug on your headphones to this jack. Set the surround mode and all SPEAKERS A and B switches to OFF if you want to cut the sound from speakers and listen to it only through the headphones.

## ⑭ VIDEO INPUT jacks

(VSX–D903S, VSX–53 and VSX–D703S models only)

VIDEO components such as a VCR or TV camera, etc. can be connected.

## ⑮ REC SEL (Recording Selector) button

You can select the component to be recorded from, on VCR 1 without using the input selector.
Each time you press the REC SEL button, the components change in the following order.

TAPE 1 → PHONO → TUNER → CD → VCR 2 → VIDEO
off ← LD ← TV/SAT ←

When the REC SELECTOR has been through all the components once, REC SELECTOR switches off.

## ⑯ GUI MODE button (VSX–D903S model only)

Switches GUI MODE on and off.

## ⑯ OSD SUB ROOM button (VSX–53 model only)

Use in combination with the separately sold MR-100 Multi-Room remote control unit.
You can watch the OSD(On Screen Display)on a TV in the sub room.

## ⑰ MULTI-ROOM & SOURCE button

(VSX–D903S and VSX–53 models only)

Use in combination with the separately sold MR-100 Multi-Room remote control unit.
When this button is on, the source selected with the input selector at that time is set to the Sub room function. The selected sub-function's sound is output through SUB ROOM SPEAKERS, and the video signal is output through the MULTI-ROOM VIDEO OUT jack. If you install speaker systems connected to the MULTI-ROOM SPEAKERS terminals in a different room, you can enjoy different sources in two different rooms with a single main unit.

## ⑱ Display section

## ⑲ TUNING MODE buttons

**FM/AM** : Use this to switch between FM and AM frequency band reception.

**MPX MODE** : Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the FM MONO indicator in the display section is lit.

**Auto stereo mode:**
Normally, leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo.

**Monaural mode:**
When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise. In this case, however, FM stereo broadcasts will be reproduced in monaural sound.

*NOTE:*
*This button has no effect on reception of AM broadcasts.*

**MEMORY** : Press this button to switch to the frequency preset mode.

**ENTER** : If you press this when in the frequency preset mode, the displayed frequency is memorized in the selected station. (Frequency and station indications flash and then light.)

**SELECT** : Press this to switch to the station mode. Then you can turn the MULTI-JOG to select a station.

## ⑳ SURROUND MODE buttons

**DOLBY PRO-LOGIC:**
Switches DOLBY PRO-LOGIC SURROUND on and off.

**DSP MODE:**
Each time you press it, the mode and the display indications change as follows:

→ JAZZ → DANCE → SIMULATED SURROUND
off ← PRO LOGIC THEATER ← HALL ←
(2CH STEREO)

## ㉑ DOLBY 3CH LOGIC button

Select this setting when stereo-source regeneration and rear speakers are not connected and you wish to use the front L, front R, and center speakers to enjoy audio/visual material bearing the DD DOLBY SURROUND mark.

## ㉒ BASS control

Use to adjust the low-frequency level. Turn clockwise to boost bass, and counterclockwise to attenuate bass. This does not operate when the DIRECT button is on.

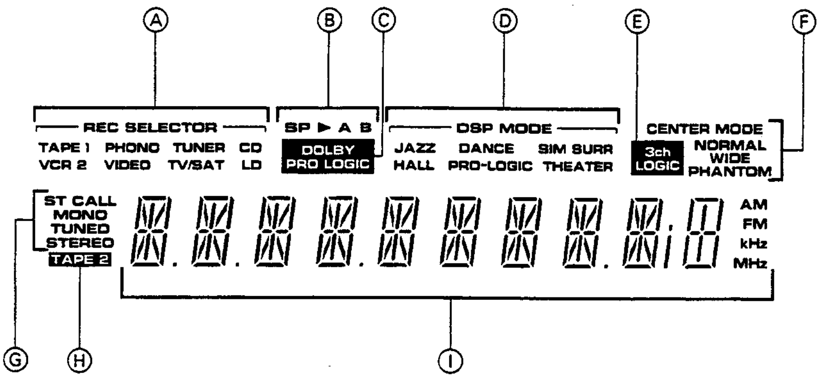
## ㉓ TREBLE control

Use to adjust the high-frequency level. Turn clockwise to boost treble, and counterclockwise to attenuate treble. This does not operate when the DIRECT button is on.

## ㉔ BALANCE control

Use to adjust the sound volume balance between left and right speakers. This does not operate when the DIRECT button is on.
**L**: Decrease the sound on the right side.
**R**: Decrease the sound on the left side.
Usually, left and right volume levels should be the same.

## DISPLAY SECTION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REC SELECTOR
TAPE 1 PHONO TUNER CD
VCR 2 VIDEO TV/SAT LD
SP ▶ A B
DOLBY PRO LOGIC
DSP MODE
JAZZ DANCE SIM SURR
HALL PRO-LOGIC THEATER
3ch LOGIC
CENTER MODE
NORMAL
WIDE
PHANTOM
ST CALL
MONO
TUNED
STEREO
TAPE 2
AM
FM
kHz
MHz
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### Ⓐ REC SELECTOR indicators

The recording source selected with the REC SEL button is usually displayed.

### Ⓑ SP (SPEAKERS) A, B indicators

Shows which speaker system (or systems) are switched on.

### Ⓒ DOLBY PRO LOGIC indicator

### Ⓓ DSP MODE indicators

### Ⓔ DOLBY 3CH LOGIC indicator

### Ⓕ CENTER MODE indicators

These display the center mode (NORMAL, WIDE, PHANTOM) during DOLBY PRO-LOGIC SURROUND, PRO LOGIC THEATER and DOLBY 3CH LOGIC operation.

### Ⓖ Tuning indicators

**ST (STATION) CALL** : Press the SELECT button to switch to the station mode, and this indicator lights.
**MONO** : Lights up when the FM MONO mode is selected with the MPX MODE button.
**TUNED** : Lights up when a station is tuned.
**STEREO** : Lights up when a stereo FM broadcast is being received.

### Ⓗ TAPE 2 indicator

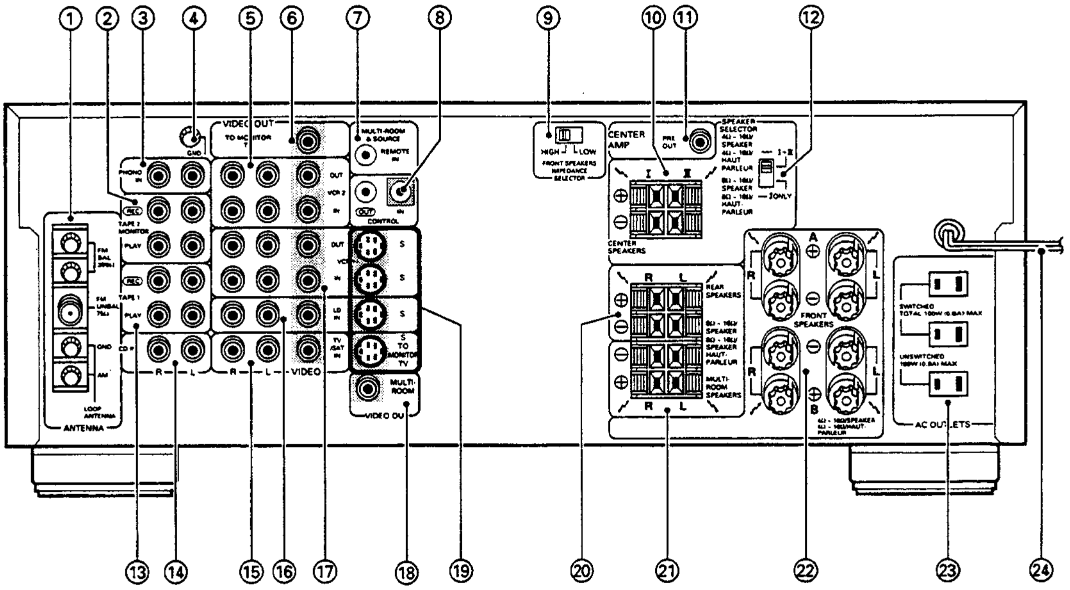
Lights up when the input selector is set to TAPE 2 MONITOR on.

### Ⓘ CHARACTER display

## 12.2 REAR PANEL FACILITIES

### ■ FOR VSX–D903S AND VSX–53 MODELS

•Illustration shows VSX–D903S U.S. and Canadian model.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VIDEO OUT
TO MONITOR
MULTI-ROOM & SOURCE
REMOTE IN
CONTROL
OUT
IN
HIGH
LOW
FRONT SPEAKERS IMPEDANCE SELECTOR
CENTER AMP
PRE OUT
SPEAKER SELECTOR
CENTER SPEAKERS
REAR SPEAKERS
FRONT SPEAKERS
MULTI-ROOM SPEAKERS
A
B
R
L
PHONO
REC
PLAY
CD
VIDEO
MULTI-ROOM
VIDEO OUT
FM
AM
GND
LOOP ANTENNA
ANTENNA
SWITCHED
UNSWITCHED
AC OUTLETS
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### ① FM/AM ANTENNA terminals

Use these antenna terminals for reception of normal FM and AM broadcasts.

### ② TAPE 2 MONITOR jacks

Connect the second cassette deck to these jacks.

**Connecting for Recording**

The tape recording jack (REC) on the cassette deck should be connected to the REC side of the TAPE 2 MONITOR jack on the receiver with a pin plug connecting cord.

**Connecting for Playback**

Connect the TAPE PLAY jack on the cassette deck to the PLAY side of the TAPE 2 MONITOR jack on the receiver with a pin plug connecting cord.

### ③ PHONO input jacks

Connect to the output cables from a turntable.

### ④ GND terminal

Connect the turntable ground lead to this terminal.

### ⑤ VCR 2 jacks

**[VIDEO OUT]**

When copying program material from the video component connected to the VCR 1, TV, VIDEO (front) or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

**[AUDIO OUT (L, R)]**

When copying program materials from the video component connected to the VCR 1, TV, VIDEO (front) or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

**[VIDEO IN]**

When monitoring the video image from a VCR used for copying, connect its VIDEO OUTPUT jacks here.

**[AUDIO IN (L, R)]**

When monitoring the audio channel from a VCR used for copying, connect its AUDIO OUTPUT jacks here.

### ⑥ VIDEO OUT (TO MONITOR TV) jack

Connect to monitor TV or to TV sets with video input terminals for watching program materials from a VCR 1, 2, TV, VIDEO (front) or LD player connected to this unit.

### ⑦ MULTI-ROOM & SOURCE REMOTE IN jack

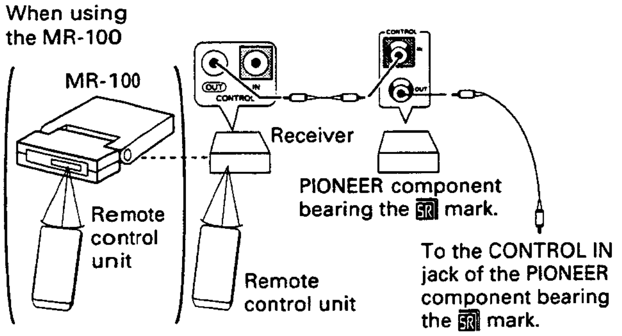
When using the MULTI-ROOM & SOURCE function, connect to the separately sold MR-100 Multi-Room remote control unit.

### ⑧ CONTROL IN/OUT jacks

**IN** : Connect this jack to other PIONEER components (main unit or remote control unit) when using those components to control this unit.

**OUT** : Connect this jack to other PIONEER components when using the remote control of this unit to control the other components.

***NOTE:***
*The receiver's remote sensor does not function when a plug is inserted in the IN jack. To operate, point the remote control unit at the remote sensor on the component to which the receiver's IN jack is connected.*


When using the MR-100
MR-100
OUT
IN
CONTROL
CONTROL
IN
OUT
Receiver
PIONEER component bearing the SR mark.
Remote control unit
Remote control unit
To the CONTROL IN jack of the PIONEER component bearing the SR mark.

### ⑨ FRONT SPEAKERS IMPEDANCE SELECTOR switch

Set this switch to match the nominal impedance of your front speakers.

***NOTE:***
*Turn off the receiver's power before changing the impedance selector switch setting.*

### ⑩ CENTER SPEAKERS terminals

Connect the center speaker to these terminals.
You can connect two speakers for dual center, so you can locate speakers on both sides of the TV.

**Speaker impedance:**
Refer to ⑫ CENTER SPEAKER SELECTOR switch.

***NOTE:***
*Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.*

### ⑪ CENTER AMP PRE OUT jack

When a separate power amplifier is used to drive the surround center speaker, connect the power amplifier to this jack.

### ⑫ CENTER SPEAKER SELECTOR switch

This switch changes the speaker impedance for when only one center speaker is connected, or two speakers are connected.

**When only one speaker is connected:**
Be sure to set the switch to "I ONLY" (down side), and always connect a speaker with an impedance of 8 Ω — 16 Ω to the I terminal.

**When two speakers are connected:**
Be sure to set the switch to "I + II" (up side), and always use speaker swith an impedance of 4 Ω — 16 Ω.

***NOTE:***
*Switch the CENTER SPEAKER SELECTOR when the unit power supply is at STANDBY. Do not switch the selector when the power supply is at ON.*

### ⑬ TAPE 1 jacks

Use these to connect the cassette deck.

**Connecting for Recording**
The tape recording jack (REC) on the cassette deck should be connected to the REC side of the TAPE 1 jack on the receiver with a pin plug connecting cord.

**Connecting for Playback**
Connect the PLAY jack on the cassette deck to the PLAY side of the TAPE 1 jack on the receiver with a pin plug connecting cord.

### ⑭ CD input jacks

Connect to the output jacks of a compact disc player.

### ⑮ TV/SAT (Satellite) jacks (input)

Use these jacks if you wish to connect a TV tuner with both video and audio outputs.

**[VIDEO IN]**
Connect the TV tuner's VIDEO OUTPUT to this jack.

**[AUDIO IN (L, R)]**
Connect the TV tuner's AUDIO OUTPUT to these jacks.

### ⑯ LD jacks

**[VIDEO IN]**
When watching the video image from an LD player, connect its VIDEO OUTPUT jacks here.

**[AUDIO IN (L,R)]**
When playing back the audio channel from an LD player, connect its AUDIO OUTPUT jacks here.

### ⑰ VCR 1 jacks

**[VIDEO OUT]**
When copying program material from the video component connected to the VCR 2, TV, VIDEO (front) or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

**[AUDIO OUT (L, R)]**
When copying program material from the video component connected to the VCR 2, TV, VIDEO (front) or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

**[VIDEO IN]**
When monitoring the video image from a VCR used for playing, connect its VIDEO OUTPUT jacks here.

**[AUDIO IN (L, R)]**
When monitoring the audio channel from a VCR used for playing, connect its AUDIO OUTPUT jacks here.

### ⑱ MULTI-ROOM VIDEO OUT jack

Connect the monitor TV for use in the Sub room.

### ⑲ S (connector) video jacks

When used in conjunction with a VCR, Video disc player (LaserDisc player), or TV monitor equipped with S video jacks, connect to these jacks.

### ⑳ REAR SPEAKERS terminals

Connect the rear speakers to these terminals.

*NOTE:*
*Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.*
*Use rear speakers with impedance of 8 Ω — 16 Ω.*

### ㉑ MULTI-ROOM SPEAKERS terminals

Connect to the Multi-room speakers.
**Speaker impedance**
Connect speaker systems with a nominal impedance of between 8 Ω and 16 Ω.

### ㉒ FRONT SPEAKERS terminals

**A**: Connect to the first set of speakers.
**B**: Connect to the second set of speakers.
**Speaker impedance:**
Refer to ⑨ FRONT SPEAKERS IMPEDANCE SELECTOR switch.

*NOTE:*
*Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.*

### ㉓ AC OUTLETS
### [U.S. and Canadian models]

**[SWITCHED TOTAL 100 W (0.8 A) MAX]**
Power supplied through these outlets is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W (0.8 A).
**[UNSWITCHED 100 W (0.8 A) MAX]**
Power flows continually to this outlet, regardless of whether the receiver is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 100 W (0.8 A).

### [Multi-voltage model]

**SWITCHED TOTAL 100 W MAX**
Power supplied through these outlets is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W.
**UNSWITCHED 100 W MAX**
Power flows continually to this outlet, regardless of whether the receiver is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 100 W.

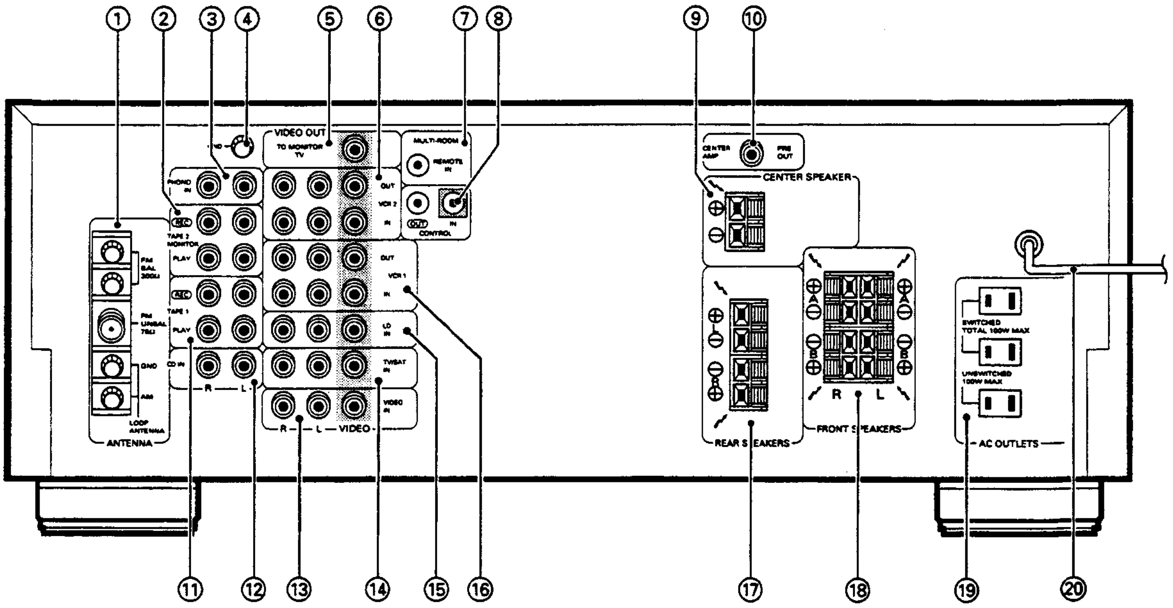
*NOTE:*
- *This unit should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.*
- *Do not connect appliances with high power consumption such as heaters, irons, or television sets to these AC OUTLETS in order to avoid overheating and fire risk.*
  *This can cause the receiver to malfunction.*

**CAUTION:**
**DO NOT CONNECT MONITOR OR TV SET.**

### ㉔ Power cord

## ■ FOR VSX–D703S AND VSX–D603S MODELS

•Illustration shows VSX–D603S U.S. model.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VIDEO OUT
TO MONITOR TV
MULTI-ROOM
REMOTE IN
PHONO IN
REC
TAPE 2 MONITOR
PLAY
TAPE 1
CD IN
OUT
VCR 2
IN
VCR 1
LD IN
TV/SAT IN
VIDEO IN
OUT
IN
CONTROL
FM BAL 300Ω
FM UNBAL 75Ω
GND
AM
LOOP ANTENNA
ANTENNA
R
L
VIDEO
CENTER AMP
PRE OUT
CENTER SPEAKER
REAR SPEAKERS
FRONT SPEAKERS
A
B
SWITCHED TOTAL 100W MAX
UNSWITCHED 100W MAX
AC OUTLETS
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### ① FM/AM ANTENNA terminals

Use these antenna terminals for reception of normal FM and AM broadcasts.

### ② TAPE 2 MONITOR jacks

Connect the second cassette deck to these jacks.

**Connecting for Recording**

The tape recording jack (REC) on the cassette deck should be connected to the REC side of the TAPE 2 MONITOR jack on the receiver with a pin plug connecting cord.

**Connecting for Playback**

Connect the TAPE PLAY jack on the cassette deck to the PLAY side of the TAPE 2 MONITOR jack on the receiver with a pin plug connecting cord.

### ③ PHONO input jacks

Connect to the output cables from a turntable.

### ④ GND terminal

Connect the turntable ground lead to this terminal.

### ⑤ VIDEO OUT (TO MONITOR TV) jack

Connect to monitor TV or to TV sets with video input terminals for watching program materials from a VCR 1, 2 or LD player connected to this unit.

### ⑥ VCR 2 jacks

**[VIDEO OUT]**

When copying program material from the video component connected to the VCR 1 or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

**[AUDIO OUT (L, R)]**

When copying program materials from the video component connected to the VCR 1 or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

**[VIDEO IN]**

When monitoring the video image from a VCR used for copying, connect its VIDEO OUTPUT jacks here.

**[AUDIO IN (L, R)]**

When monitoring the audio channel from a VCR used for copying, connect its AUDIO OUTPUT jacks here.

### ⑦ MULTI-ROOM REMOTE IN jack

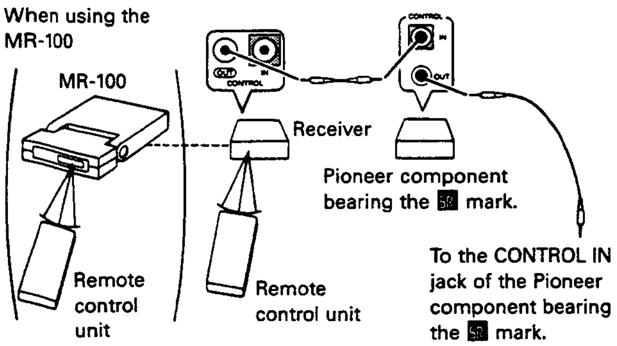
Connect to the separately sold MR-100 Multi-Room remote control unit.

### ⑧ CONTROL IN/OUT jacks

| | |
|---|---|
| **IN** | : Connect this jack to other Pioneer components (main unit or remote control unit) when using those components to control this unit. |
| **OUT** | : Connect this jack to other Pioneer components when using the remote control of this unit to control the other components. |

***NOTE:***

*The receiver's remote sensor does not function when a plug is inserted in the IN jack. To operate, point the remote control unit at the remote sensor on the component to which the receiver's IN jack is connected.*


When using the MR-100
MR-100
OUT
IN
CONTROL
CONTROL
IN
OUT
Receiver
Pioneer component bearing the SR mark.
Remote control unit
Remote control unit
To the CONTROL IN jack of the Pioneer component bearing the SR mark.

### ⑨ CENTER SPEAKER terminals

Connect the center speaker to these terminals.

***NOTE:***

*Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctions or breakdowns may occur when conductors come into contact with each other.*

*Use center speaker with impedance of 8 Ω to 16 Ω.*

### ⑩ CENTER AMP PRE OUT jack

When a separate power amplifier is used to drive the surround center speaker, connect the power amplifier to this jack.

### ⑪ TAPE 1 jacks

Use these to connect the cassette deck.

**Connecting for Recording**

The tape recording jack (REC) on the cassette deck should be connected to the REC side of the TAPE 1 jack on the receiver with a pin plug connecting cord.

**Connecting for Playback**

Connect the PLAY jack on the cassette deck to the PLAY side of the TAPE 1 jack on the receiver with a pin plug connecting cord.

### ⑫ CD input jacks

Connect to the output jacks of a compact disc player.

### ⑬ VIDEO input jacks (VSX–D603S model only)

Connect to the output jacks of video components.

### ⑭ TV/SAT jacks (input)

Use these jacks if you wish to connect a TV tuner with both video and audio outputs.

**[VIDEO IN]**

Connect the TV tuner's VIDEO OUTPUT to this jack.

**[AUDIO IN (L, R)]**

Connect the TV tuner's AUDIO OUTPUT to these jacks.

### ⑮ LD jacks

**[VIDEO IN]**

When watching the video image from an LD player, connect its VIDEO OUTPUT jacks here.

**[AUDIO IN (L,R)]**

When playing back the audio channel from an LD player, connect its AUDIO OUTPUT jacks here.

### ⑯ VCR 1 jacks

**[VIDEO OUT]**

When copying program material from the video component connected to the VCR 2 or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

**[AUDIO OUT (L, R)]**

When copying program material from the video component connected to the VCR 2 or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

**[VIDEO IN]**

When monitoring the video image from a VCR used for playing, connect its VIDEO OUTPUT jacks here.

**[AUDIO IN (L, R)]**

When monitoring the audio channel from a VCR used for playing, connect its AUDIO OUTPUT jacks here.

### ⑰ REAR SPEAKERS terminals

Connect the rear speakers to these terminals.

***NOTE:***

*Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctions or breakdowns may occur when conductors come into contact with each other.*

*Use rear speakers with impedance of 8 Ω to 16 Ω.*

### ⑱ FRONT SPEAKERS terminals

**A**: Connect to the first set of speakers.
**B**: Connect to the second set of speakers.

***NOTE:***

*Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctions or breakdowns may occur when conductors come into contact with each other.*

*Use speakers with impedance of 8 Ω to 16 Ω.*

### ⑲ AC OUTLETS

**[SWITCHED TOTAL 100 W (0.8 A) MAX]**

Power supplied through these outlets is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W (0.8 A).

**[UNSWITCHED 100 W (0.8 A) MAX]**

Power flows continually to this outlet, regardless of whether the receiver is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 100 W (0.8 A).

The equipment should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.

***NOTE:***

- *This unit should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.*
- *Do not connect appliances with high power consumption such as heaters, irons, or television sets to these AC OUTLETS in order to avoid overheating and fire risk.*
  *This can cause the receiver to malfunction.*

**CAUTION:**
**DO NOT CONNECT MONITOR OR TV SET.**

### ⑳ Power cord

# 13. SPECIFICATIONS

## Amplifier section

**Continuous average power output of 130 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.05 %** total harmonic distortion (front).**

| | |
|---|---|
| Continuous Power Output (When using SURROUND MODE) | |
| (Rear only driven) | 50 W (1 kHz, 0.8 %, 8 Ω) |
| (Front and Center driven) | |
| Front | 100 W + 100 W (1 kHz, 0.8 %, 8 Ω) |
| Center | 100 W (1 kHz, 0.8 %, 8 Ω) |
| Dynamic Power (2 Ω/4 Ω) | 300 W/290 W |
| Input (Sensitivity/Impedance) | |
| PHONO MM | 2.8 mV/47 kΩ |
| CD, TAPE 1, TAPE 2, LD, VCR 1, VCR 2, VIDEO, TV/SAT | 200 mV/47 kΩ |
| Phono Overload Level (T.H.D. 0.1 %, 1 kHz) | |
| PHONO MM | 100 mV |
| Frequency Response | |
| PHONO MM | 20 Hz to 20,000 Hz ±0.3 dB |
| CD, TAPE 1, TAPE 2, LD, VCR 1, VCR 2, VIDEO, TV/SAT | 5 Hz to 100,000 Hz $^{+0}_{-3}$ dB |
| Output (Level/Impedance) | |
| TAPE 1 REC, TAPE 2 REC | 200 mV/2.2 kΩ |
| VCR 1 OUT, VCR 2 OUT | 200 mV/2.2 kΩ |
| Tone Control | |
| BASS | ±8 dB (150 Hz) |
| TREBLE | ±8 dB (10 kHz) |
| SUPER BASS | +8 dB (80 Hz) |
| Signal-to-Noise Ratio (IHF, short circuited, A network) | |
| PHONO MM | 76 dB |
| CD, TAPE 1, TAPE 2, LD, VCR 1, VCR 2, TV/SAT, VIDEO | 97 dB |
| Signal-to-Noise Ratio (EIA, at 1 W 1kHz) | |
| PHONO MM | 77 dB |
| CD, TAPE 1, TAPE 2, LD, VCR 1, VCR 2, TV/SAT, VIDEO | 80 dB |

- * ***Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier.***
- ** ***Measured by Audio Spectrum Analyzer.***

## VIDEO Section

| | |
|---|---|
| Input (Sensitivity/Impedance) | |
| VCR 1, VCR 2, LD, VIDEO | 1 Vp-p/75 Ω |
| Output (Level/Impedance) | |
| VCR 1, VCR 2, MONITOR | 1 Vp-p/75 Ω |
| Frequency Response | |
| VCR 1, VCR 2, LD, VIDEO → MONITOR | 5 Hz to 7 MHz $^{+0}_{-3}$ dB |
| Signal-to-Noise Ratio | 55 dB |
| Cross Talk | 55 dB |

## FM Tuner Section

| | |
|---|---|
| Frequency Range | 87.5 MHz to 108 MHz |
| Usable Sensitivity | Mono: 11.2 dBf, IHF (1.0 μV/75 Ω) |
| 50 dB Quieting Sensitivity | Mono: 16.8 dBf (1.9 μV/75 Ω)<br>Stereo: 38.6 dBf (23.3 μV/75 Ω) |
| Signal-to-Noise Ratio | Mono: 80 dB (at 65 dBf)<br>Stereo: 76 dB (at 85 dBf) |
| Distortion | Mono: 0.2 % (1 kHz)<br>Stereo: 0.3 % (1 kHz) |
| Capture Ratio | 1 dB |
| Alternate Channel Selectivity | 65 dB (400 kHz) |
| Stereo Separation | 45 dB (1 kHz) |
| Frequency Response | 30 Hz to 15 kHz $^{+0.5}_{-2.0}$ dB |
| Image Interference Ratio | 50 dB |
| IF Interference Ratio | 80 dB |
| Antenna Input | 300 Ω balanced<br>75 Ω unbalanced |

## AM Tuner Section

| | |
|---|---|
| Frequency Range | |
| With 9 kHz step | 531 kHz to 1,602 kHz |
| With 10 kHz step | 530 kHz to 1,700 kHz |
| Sensitivity (IHF, Loop antenna) | 300 μV/m |
| Selectivity | 25 dB |
| Signal-to-Noise Ratio | 50 dB |
| Antenna | Loop antenna |

## Miscellaneous

| | |
|---|---|
| Power Requirements | |
| U.S. Model | AC 120 V, 60 Hz |
| Multi-voltage Model | AC 110 V/120 — 127 V/220 V/240 V (Switchable), 50/60 Hz |
| Power Consumption | |
| U.S. Model | 420 W |
| Multi-voltage Model | 950 W |
| In Standby Condition | 3 W |
| AC Outlets | |
| U.S. Model | |
| SWITCHED x 2 | TOTAL 100 W (0.8 A) MAX |
| UNSWITCHED x 1 | 100 W (0.8 A) MAX |
| Multi-voltage Model | |
| SWITCHED x 2 | TOTAL 100 W MAX |
| UNSWITCHED x 1 | 100 W MAX |

Dimensions

| | |
|---|---|
| VSX–D903S Model | 420(W)×162(H)×425(D)mm<br>16-9/16(W)×6-3/8(H)×16-3/4(D)in |
| VSX–53 Model | 440(W)×162(H)×425(D)mm<br>17-5/16(W)×6-3/8(H)×16-3/4(D)in |
| VSX–D703S and VSX–D603S Models | 420(W)×162(H)×414(D)mm<br>16-9/16(W)×6-3/8(H)×16-5/16(D)in |

Weight (without package)

| | |
|---|---|
| VSX–D903S Model | 13.0kg(28 lb 11oz) |
| VSX–53 Model | 12.7kg(28 lb) |
| VSX–D703S Model | 12.3kg(27 lb 2oz) |
| VSX–D603S Model | 12.2kg(26 lb 14oz) |

## Furnished Parts

| | |
|---|---|
| FM T-type Antenna | 1 |
| AM Loop Antenna | 1 |
| Dry Cell Batteries | 2 |
| Remote Control Unit | 1 |
| Operating Instructions | 1 |

***NOTE:***
*Specifications and the design are subject to possible modifications without notice due to improvements.*

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